

FIG. 1A

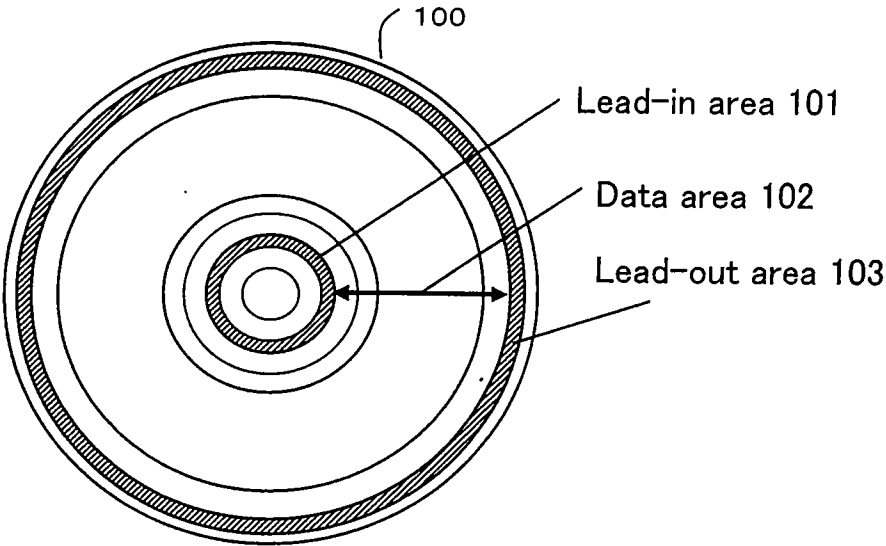


FIG. 1B

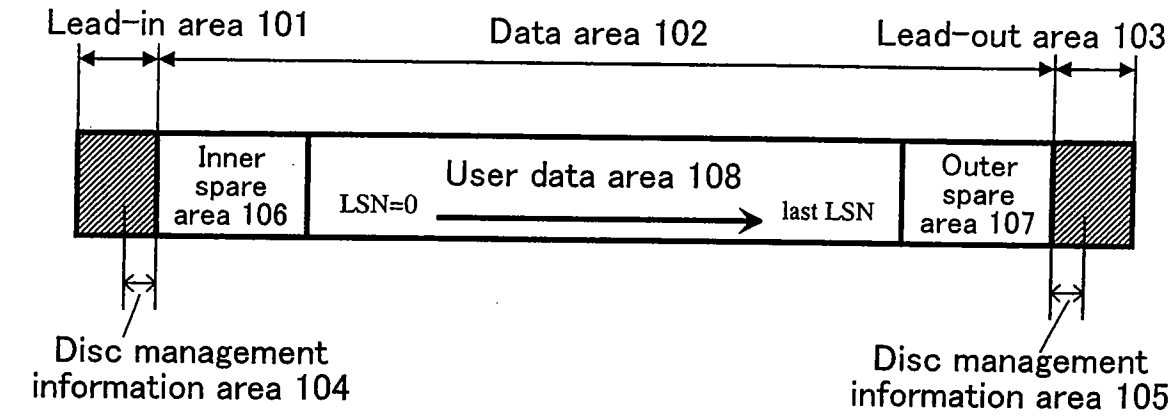


FIG. 1C

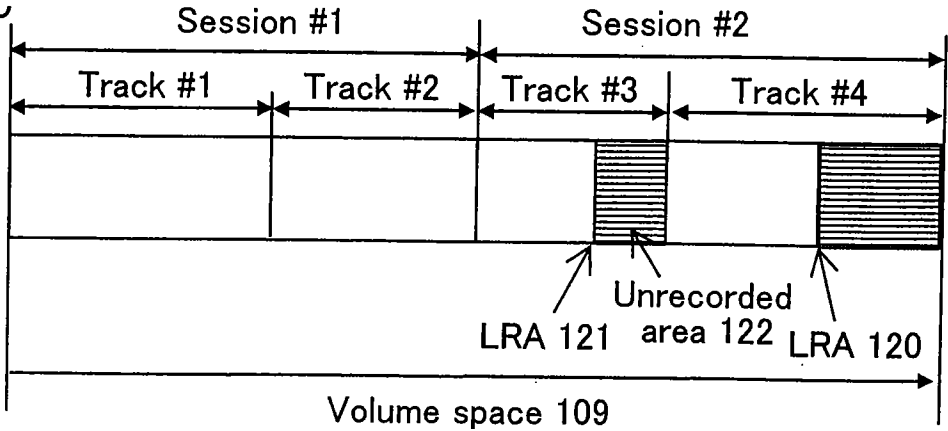


FIG. 2A

Session management information 200

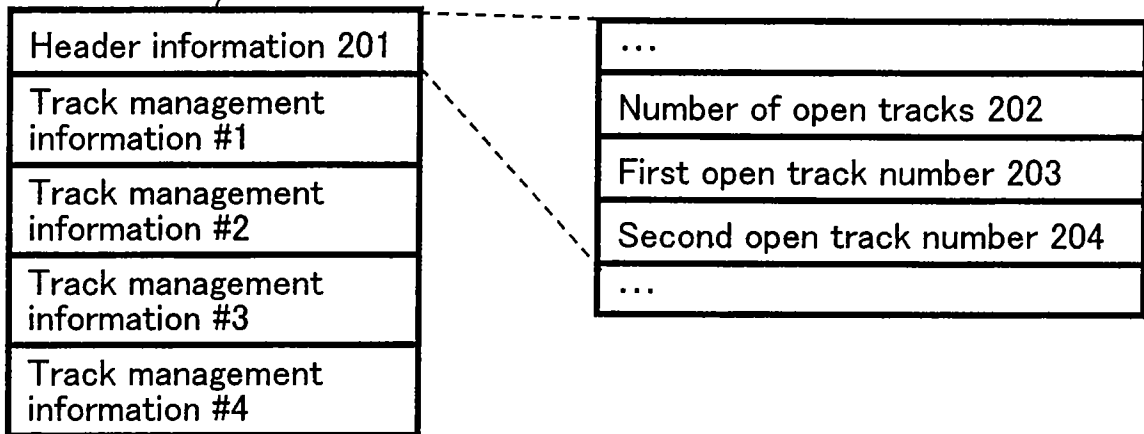


FIG. 2B

Track management information 210

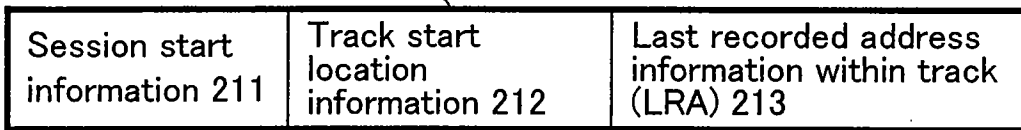


FIG. 2C

Space bitmap management information 220

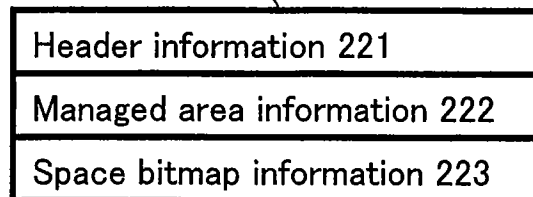


FIG.3

Disc structure information 1100

General information 1101
Replacement management information list location information 1102
User area start location information 1103
User area end location information 1104
Spare area information 1105
Recording mode information 1106
Last recorded address information 1107
Disc management information area information 1107b
Spare area management information 1108
Session management information location information 1109
Space bitmap management information location information 1110

FIG.4

100b

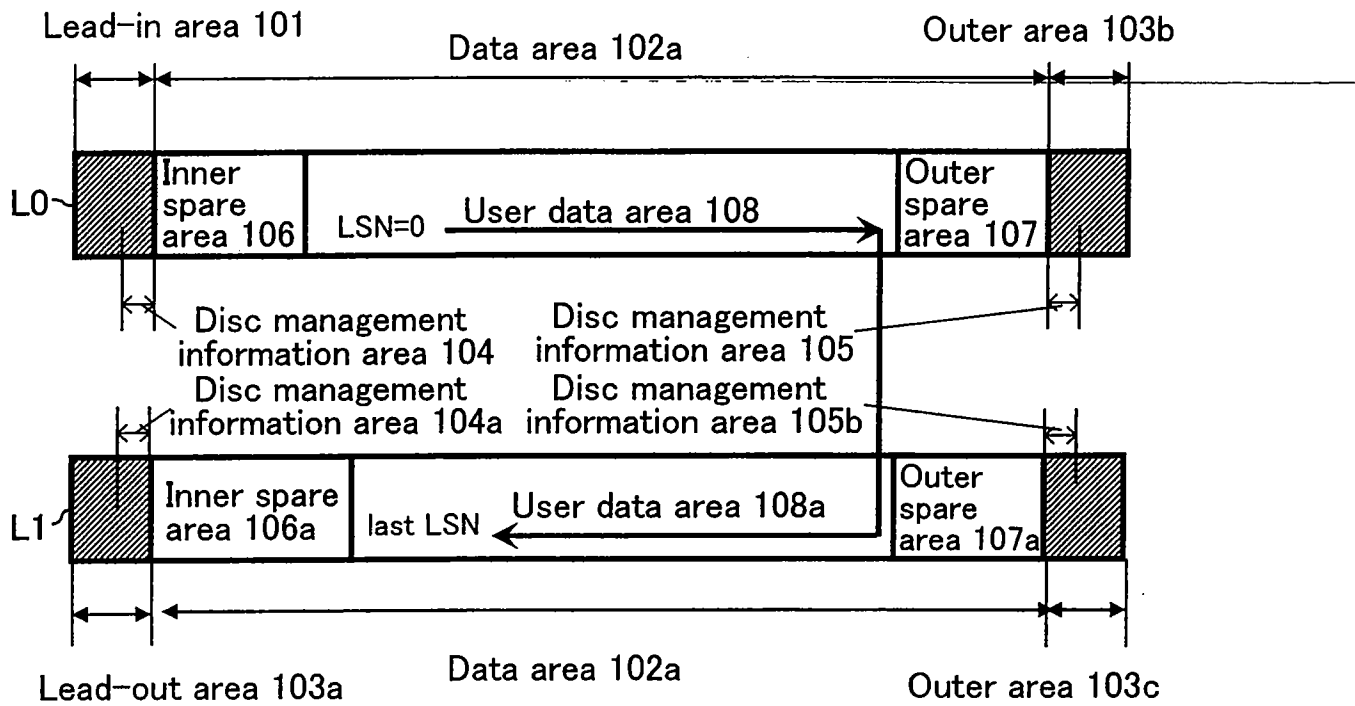
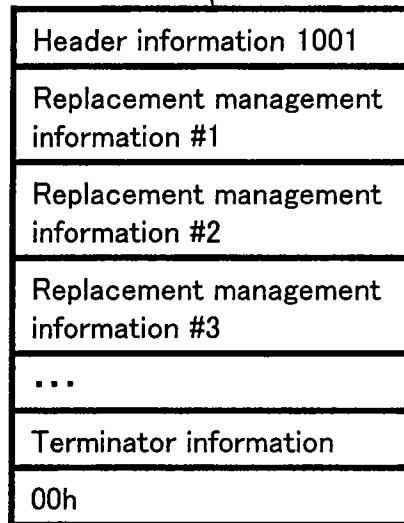


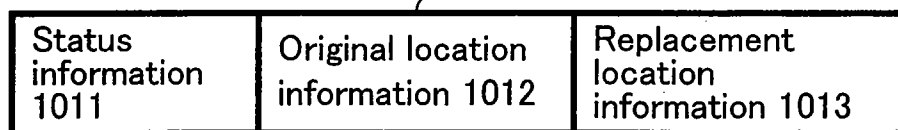
FIG.5A

Replacement management
information list 1000

Header information 1001
Replacement management information #1
Replacement management information #2
Replacement management information #3
...
Terminator information
00h

FIG.5B

Replacement management information 1010



Status information 1011	Original location information 1012	Replacement location information 1013
-------------------------	------------------------------------	---------------------------------------

FIG.6

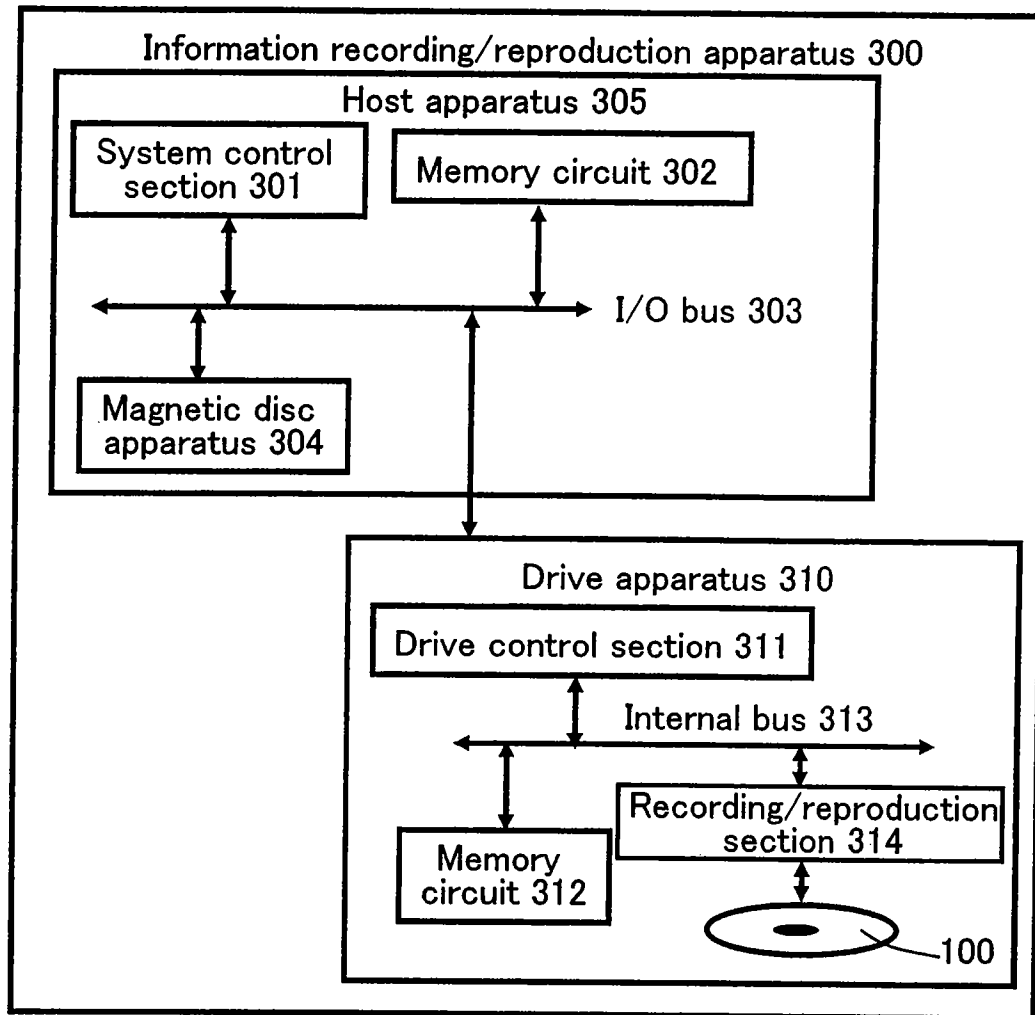


FIG.7

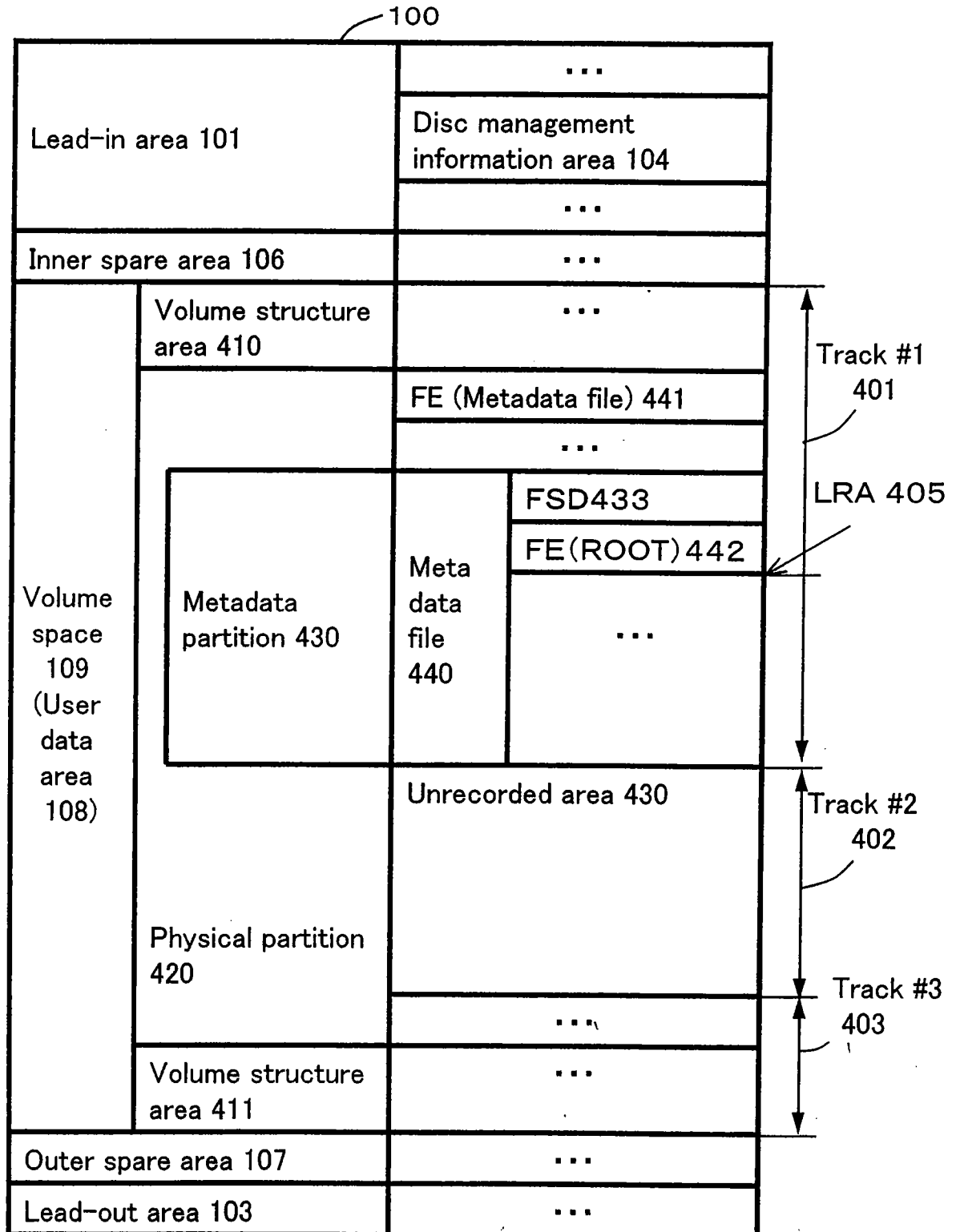


FIG.8A

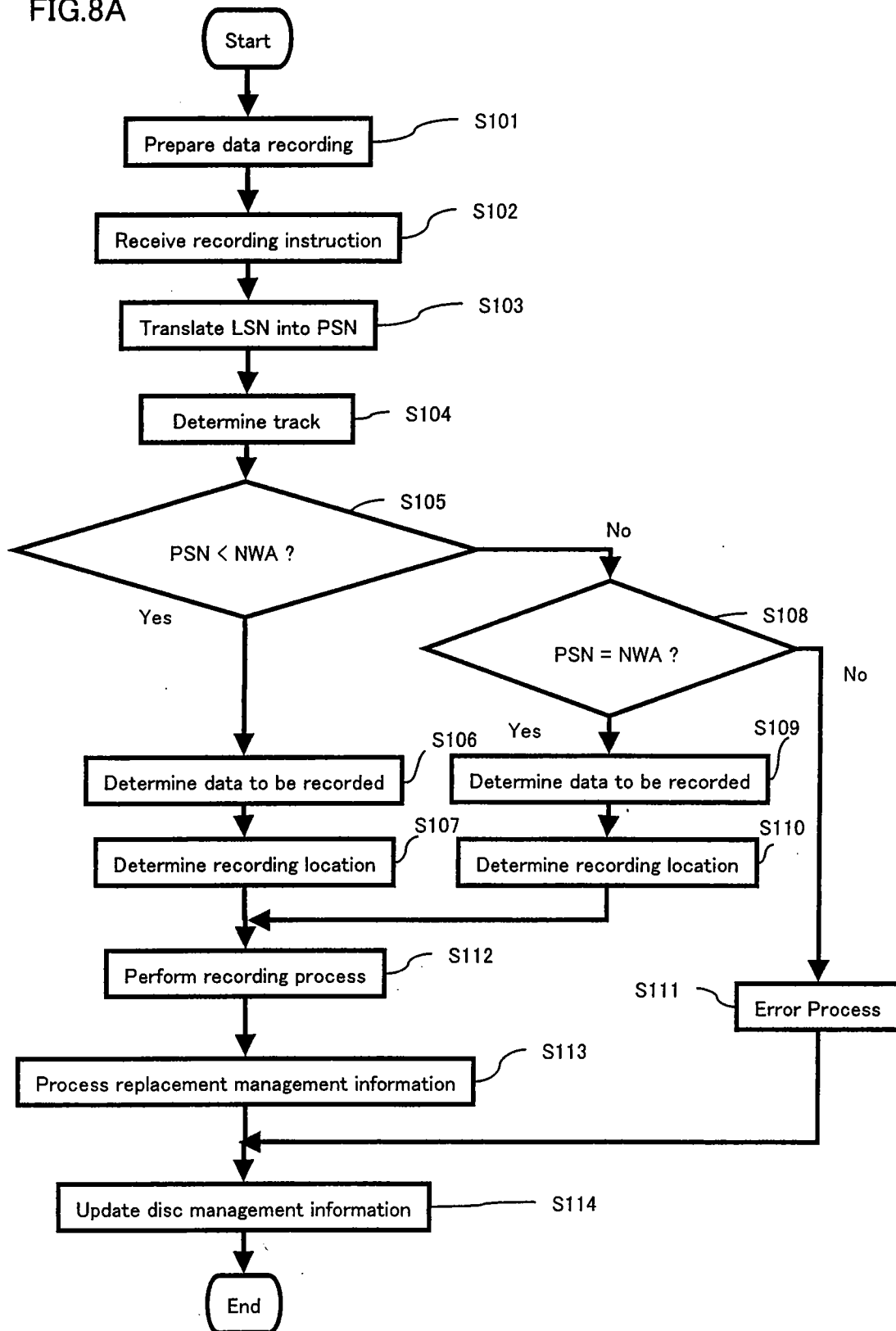


FIG.8B

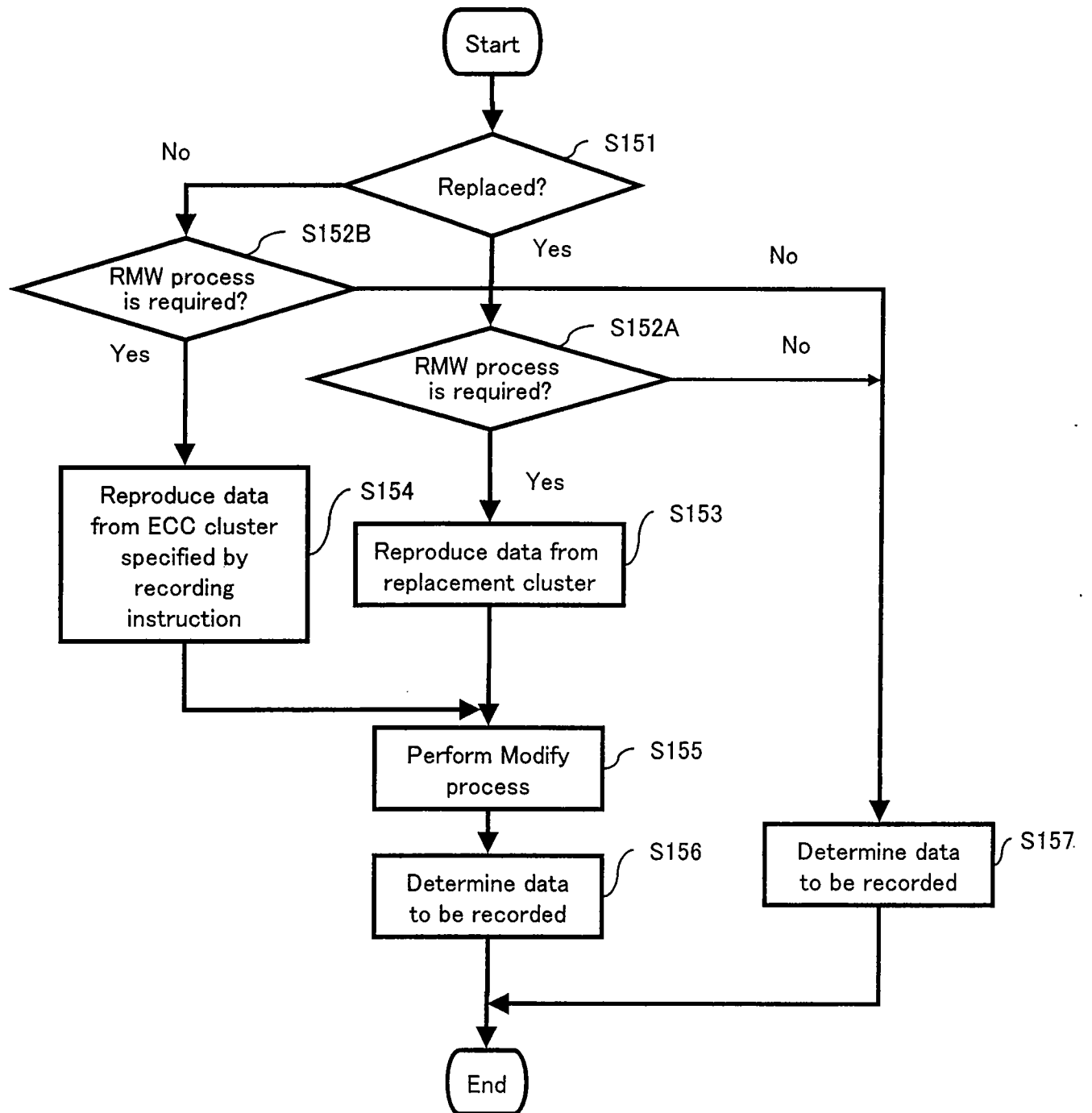


FIG.9

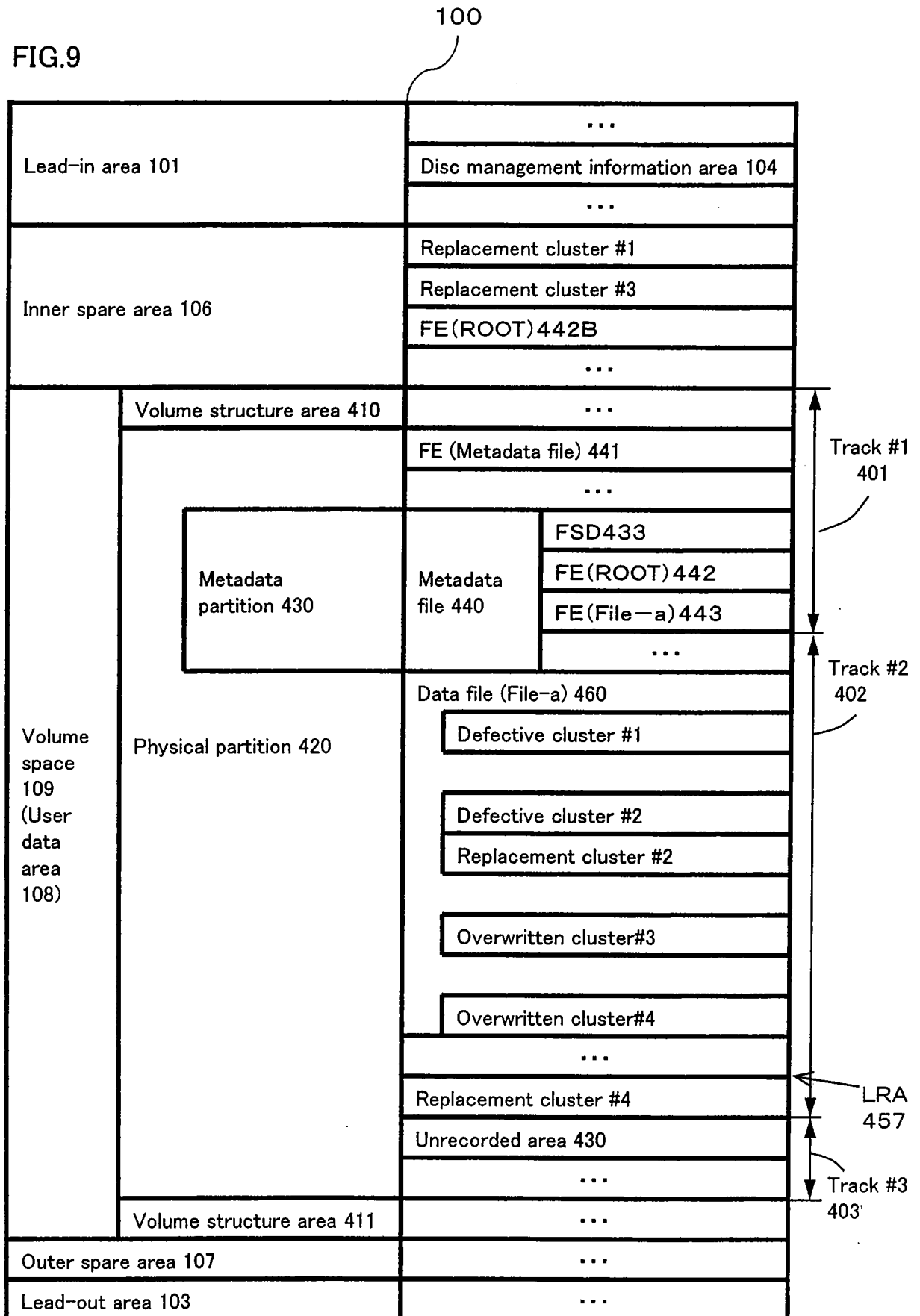


FIG.10

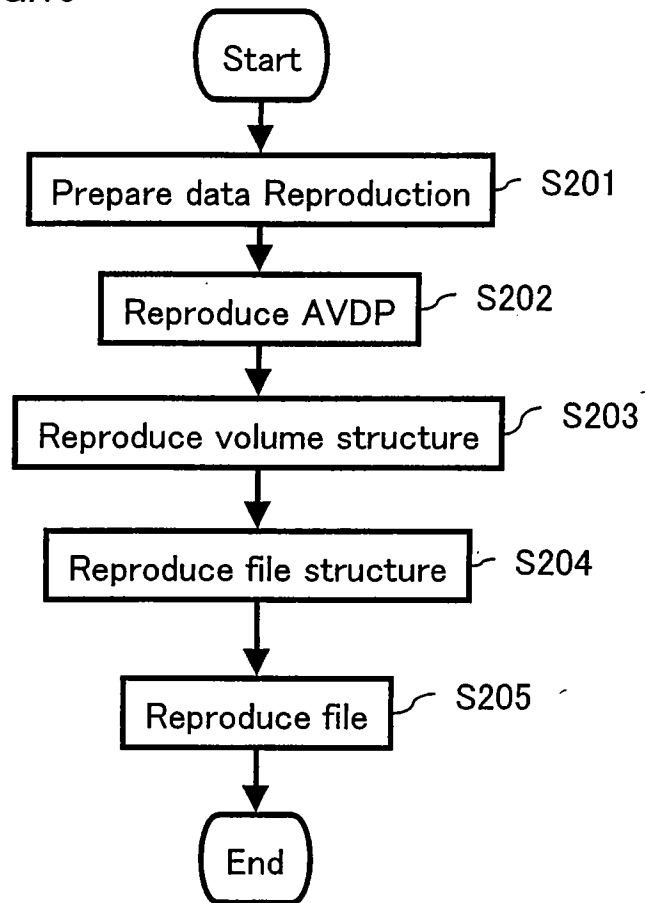


FIG.11

Replacement management information 1010B

Status information 1011			Original location information 1012	Replacement location information 1013	Type
Flag1	Flag2	Flag3			
0	0	00	Defective cluster or Overwritten cluster location information	Replacement cluster location information (in Spare area)	(1)
0	0	01	Defective clusters or Overwritten clusters start location information	Replacement cluster start location information (in Spare area)	(2)
0	0	10	Defective clusters or Overwritten clusters end location information	Replacement cluster end location information (in Spare area)	(3)
0	1	00	Defective cluster or Overwritten cluster location information	Replacement cluster location information (in User data area)	(4)
0	1	01	Defective clusters or Overwritten clusters start location information	Replacement cluster start location information (in User data area)	(5)
0	1	10	Defective clusters or Overwritten clusters end location information	Replacement cluster end location information (in User data area)	(6)
1	0	00	Defective cluster location information	—	(7)

Flag1

For replacement: 0

For defect: 1

Flag2

Replace in Spare area or no replacement cluster: 0

Replace in User data area: 1

Flag3

Single cluster : 00

Contiguous clusters (start location) : 01

Contiguous clusters (end location) : 10

FIG. 12

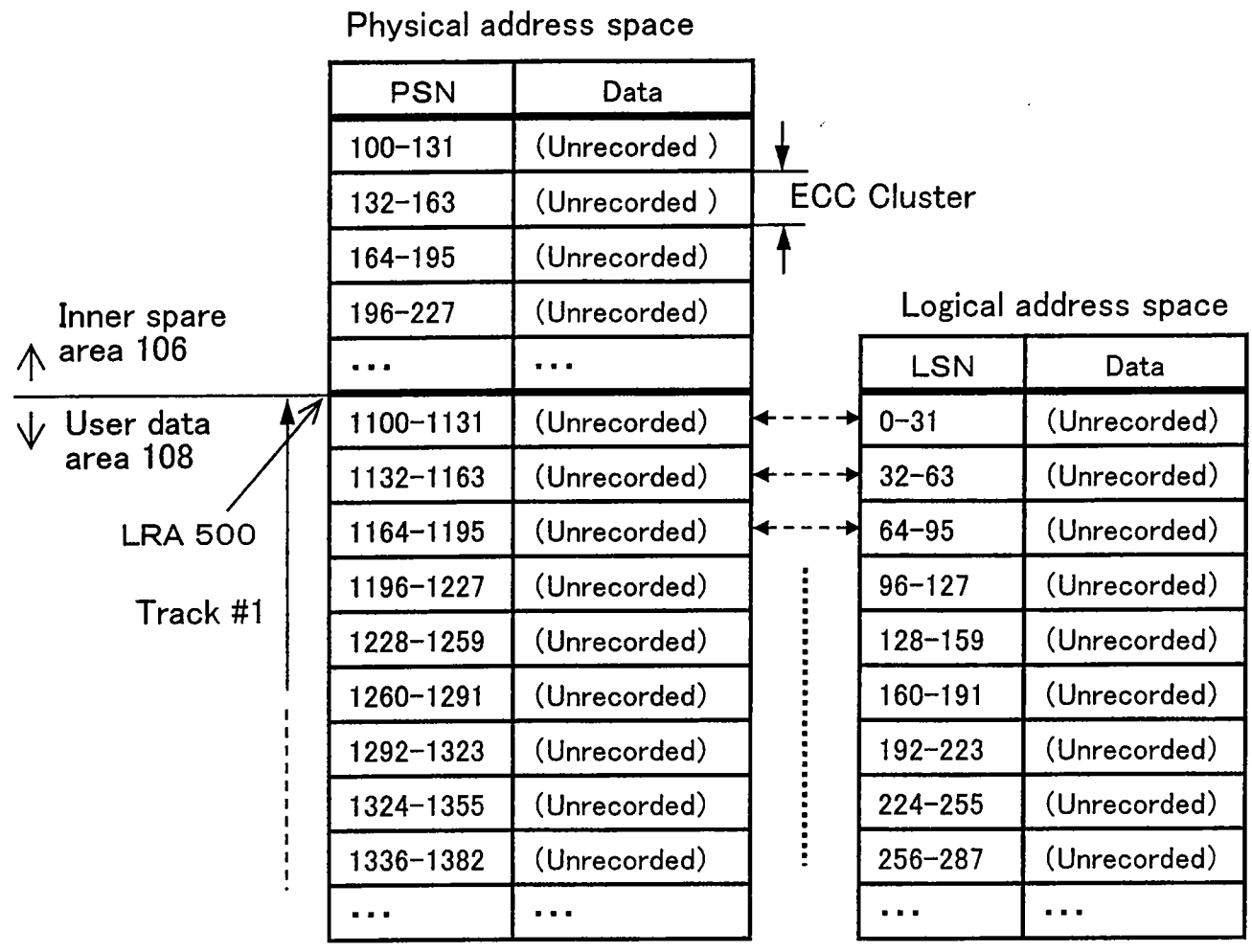


FIG. 13A

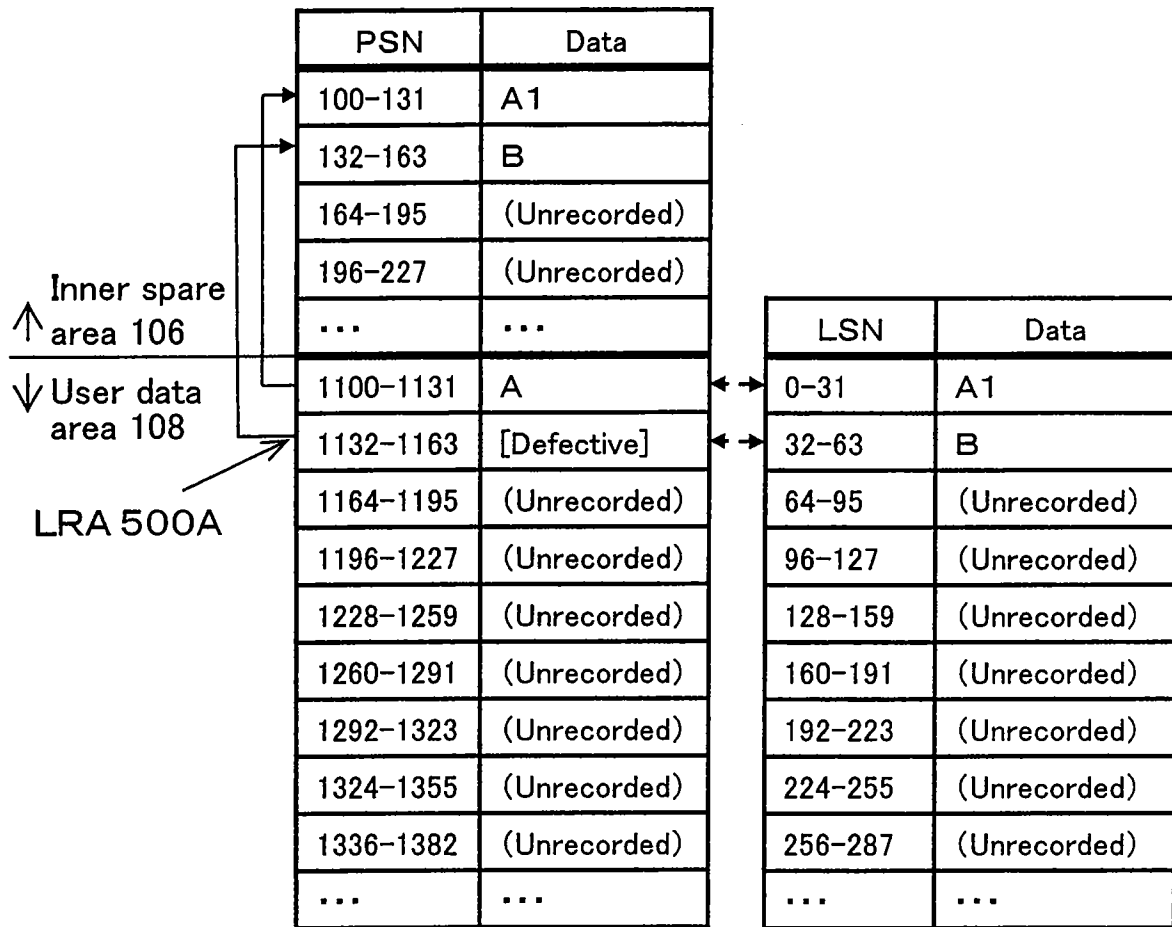


FIG. 13B

1000A

Status information			Original location	Replacement location
0	0	00	1100	100
0	0	00	1132	132

511

512

FIG. 14A

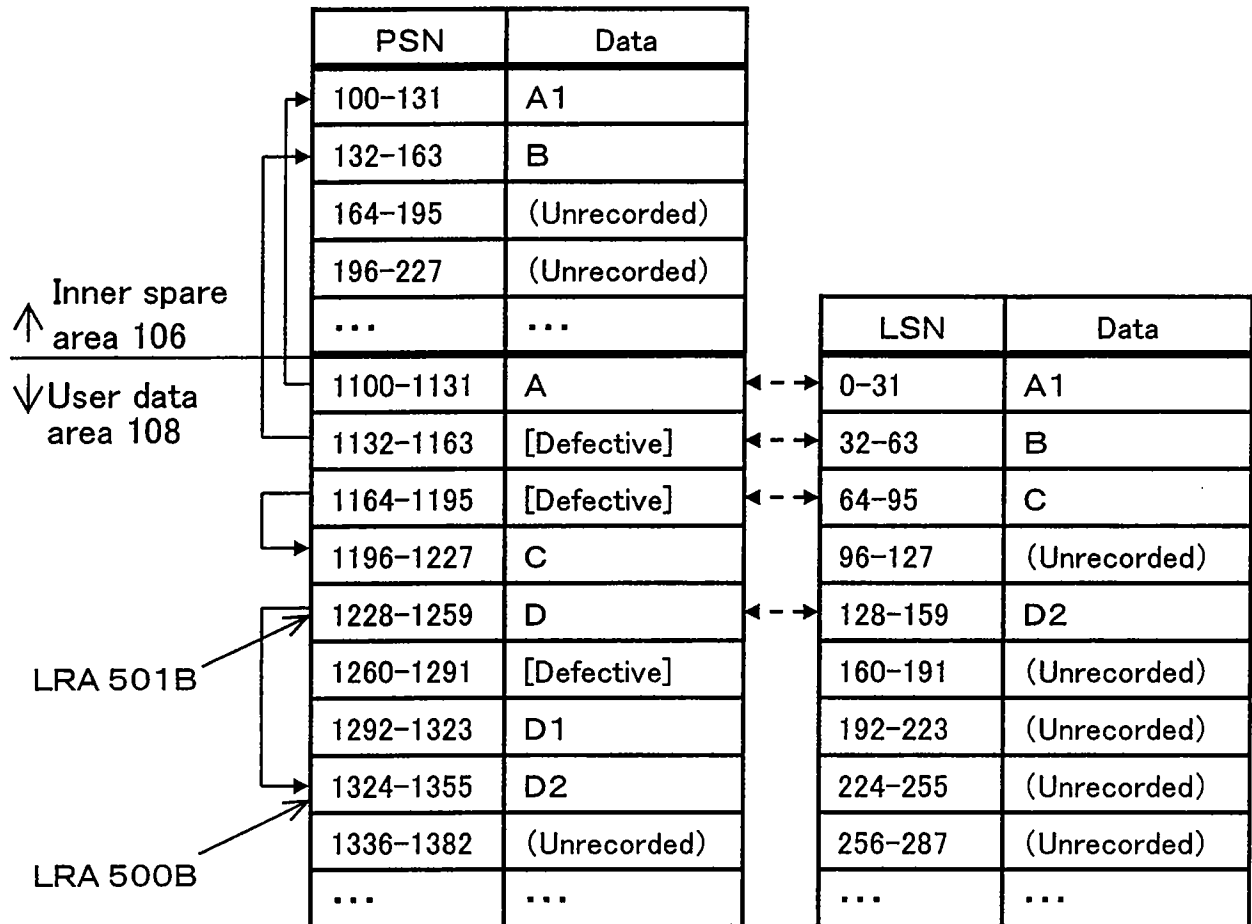


FIG. 14B

1000B

Status information			Original location	Replacement location	
0	0	00	1100	100	511
0	0	00	1132	132	512
0	1	00	1164	1196	513
0	1	00	1228	1292	514
0	1	00	1228	1324	514A
1	0	00	1260	0	515

FIG. 15A

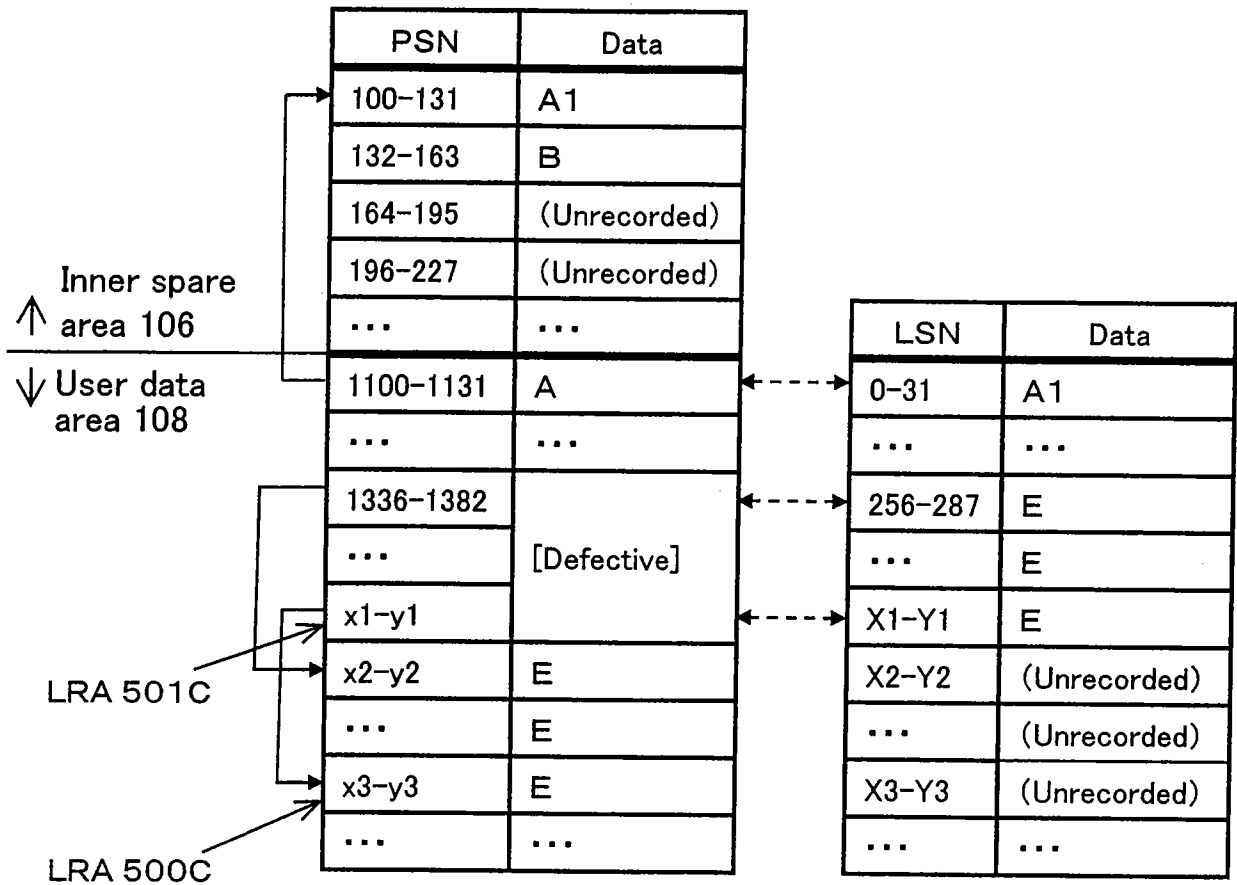


FIG. 15B

1000C

Status information			Original location	Replacement location
0	0	00	1100	100
0	0	00	1132	132
0	1	00	1164	1196
0	1	00	1228	1324
0	1	01	1336	x2
0	1	10	x1	x3
1	0	00	1260	0

511

512

513

514A

516

517

515

FIG. 16A

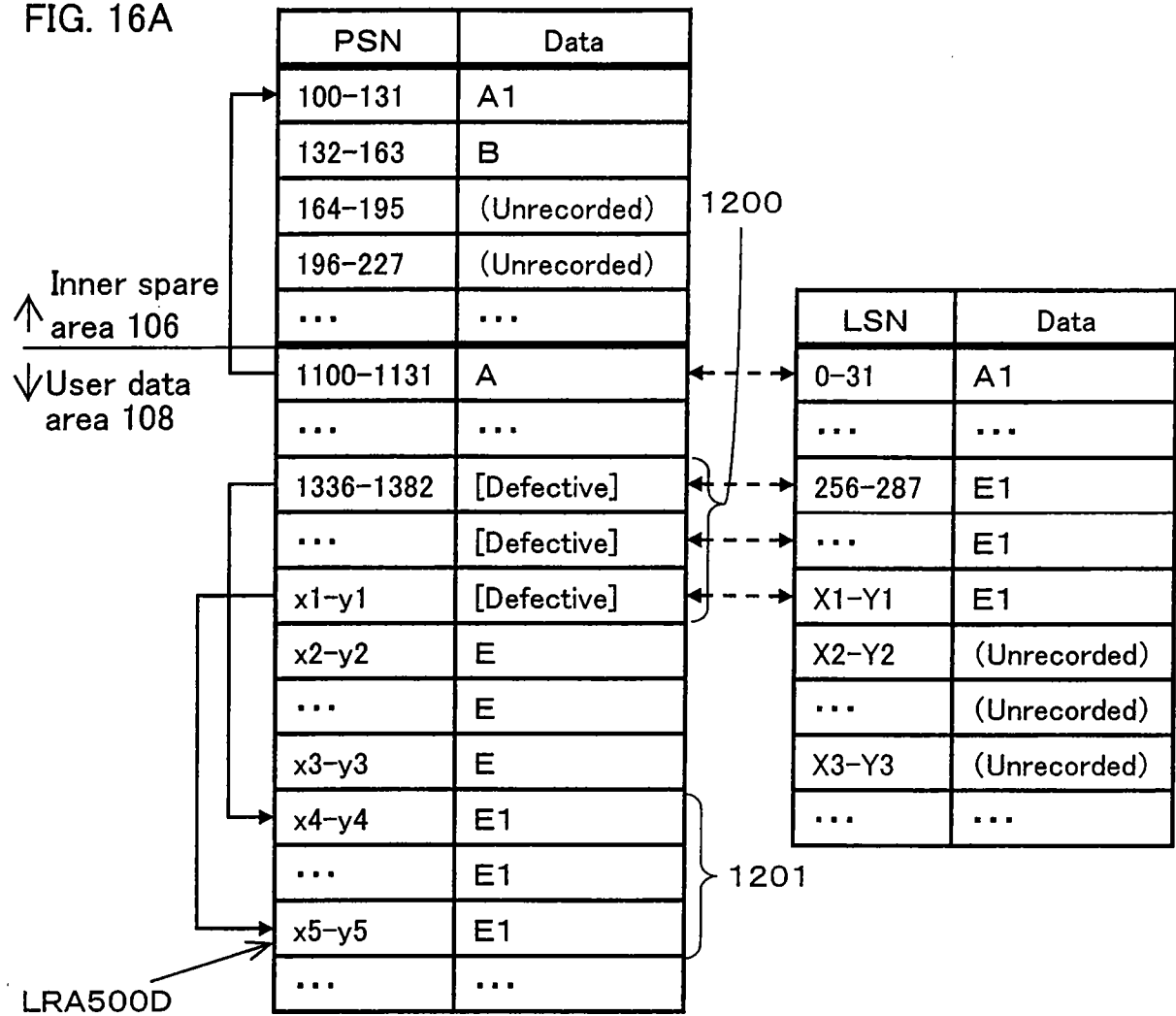


FIG. 16B

1000D

Status information			Original location	Replacement location
0	0	00	1100	100
0	0	00	1132	132
0	1	00	1164	1196
0	1	00	1228	1324
0	1	01	1336	x2
0	1	10	x1	x3
0	1	01	1336	x4
0	1	10	x1	x5
1	0	00	1260	0

511

512

513

514A

516

517

516A

517A

515

FIG. 17A

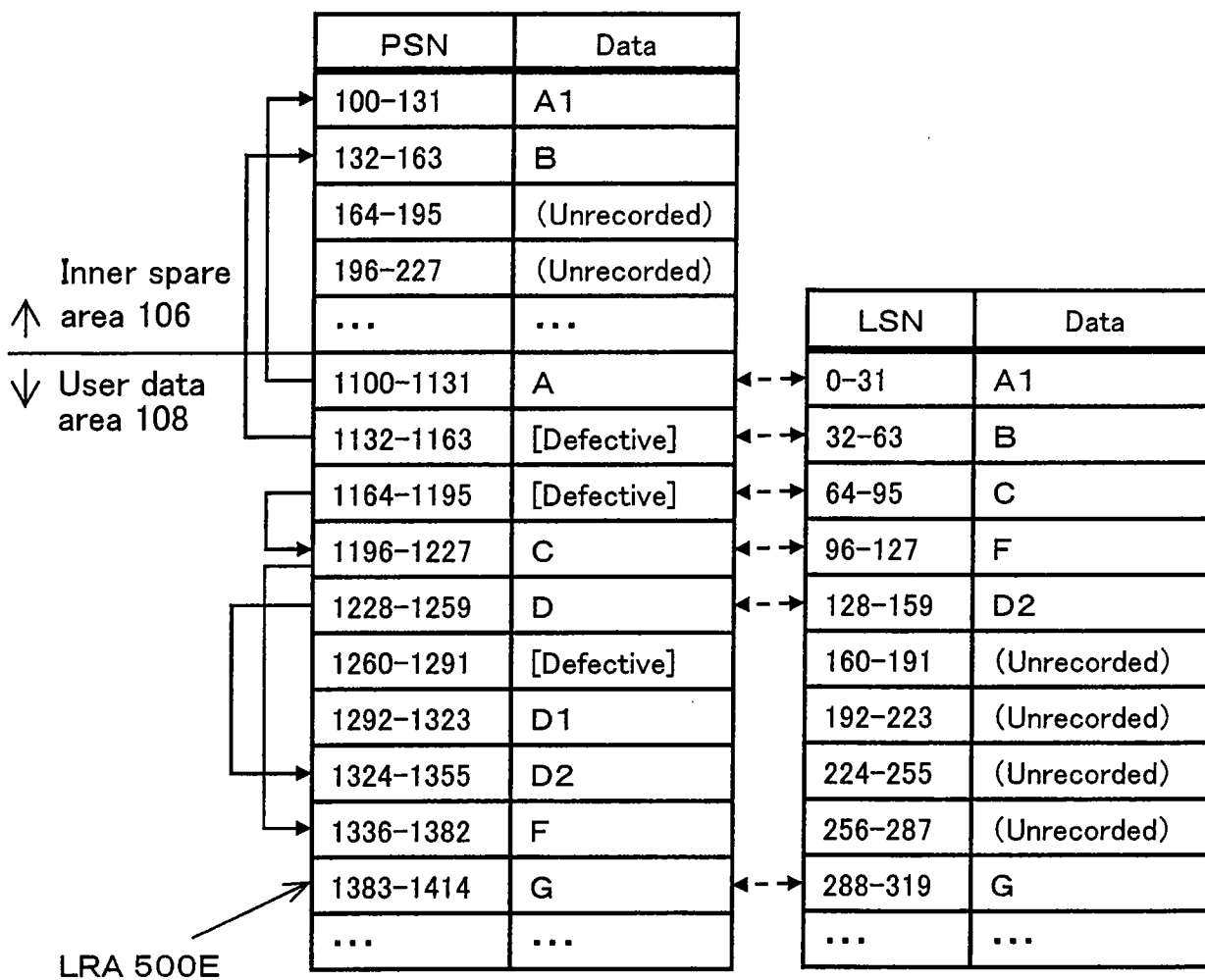


FIG. 17B

1000E

Status information			Original location	Replacement location
0	0	00	1100	100
0	0	00	1132	132
0	1	00	1164	1196
0	1	00	1196	1336
0	1	00	1228	1324
1	0	00	1260	0

511

512

513

518

514A

515

FIG. 18

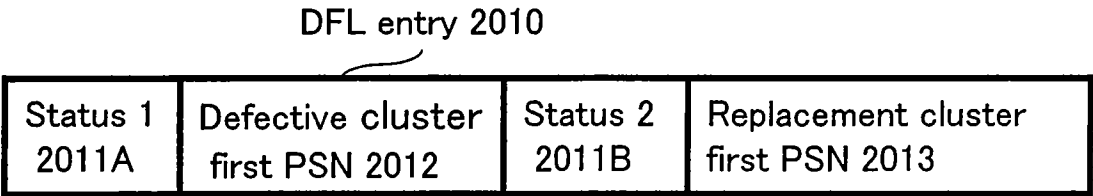


FIG. 19A

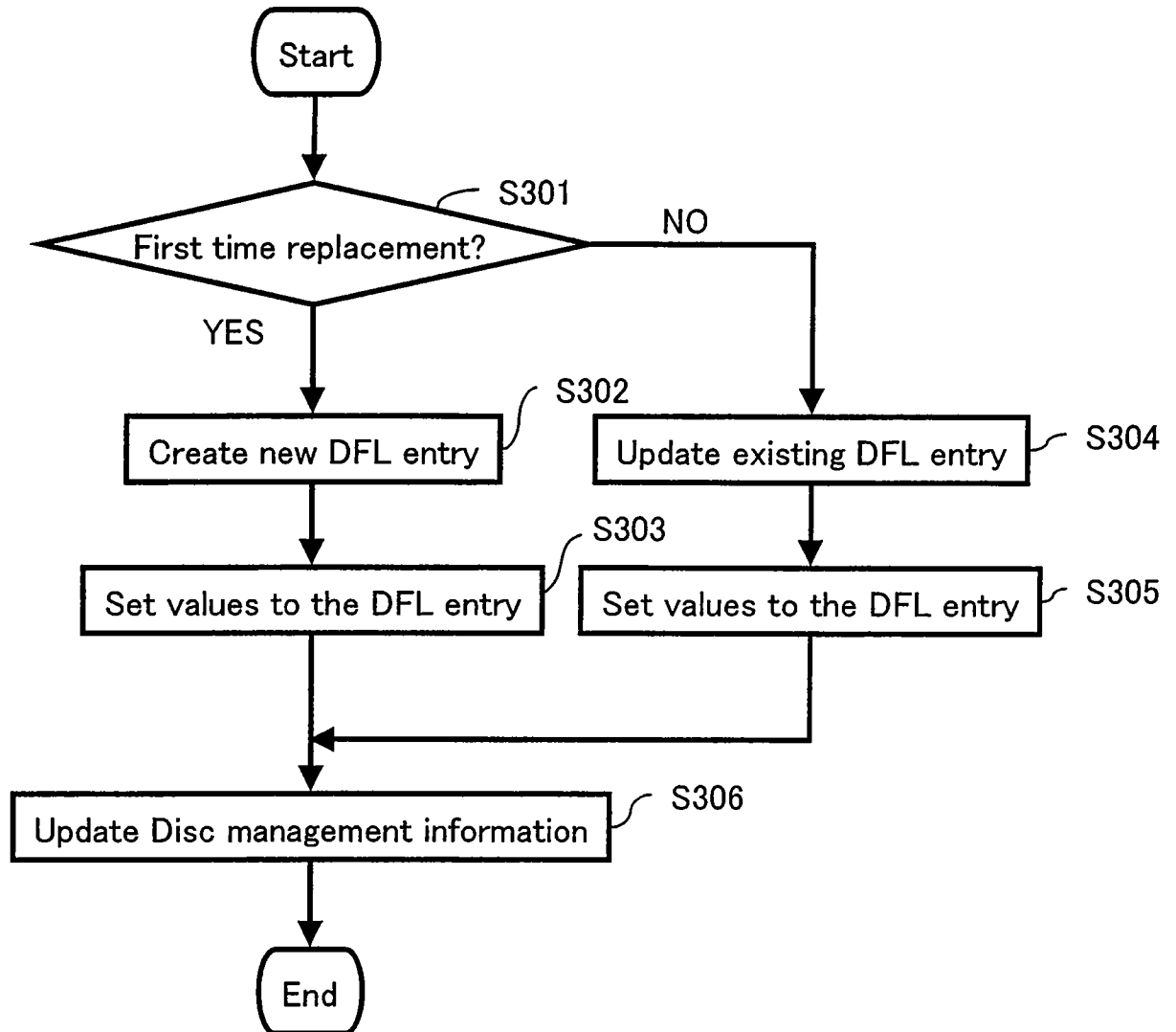


FIG.19B

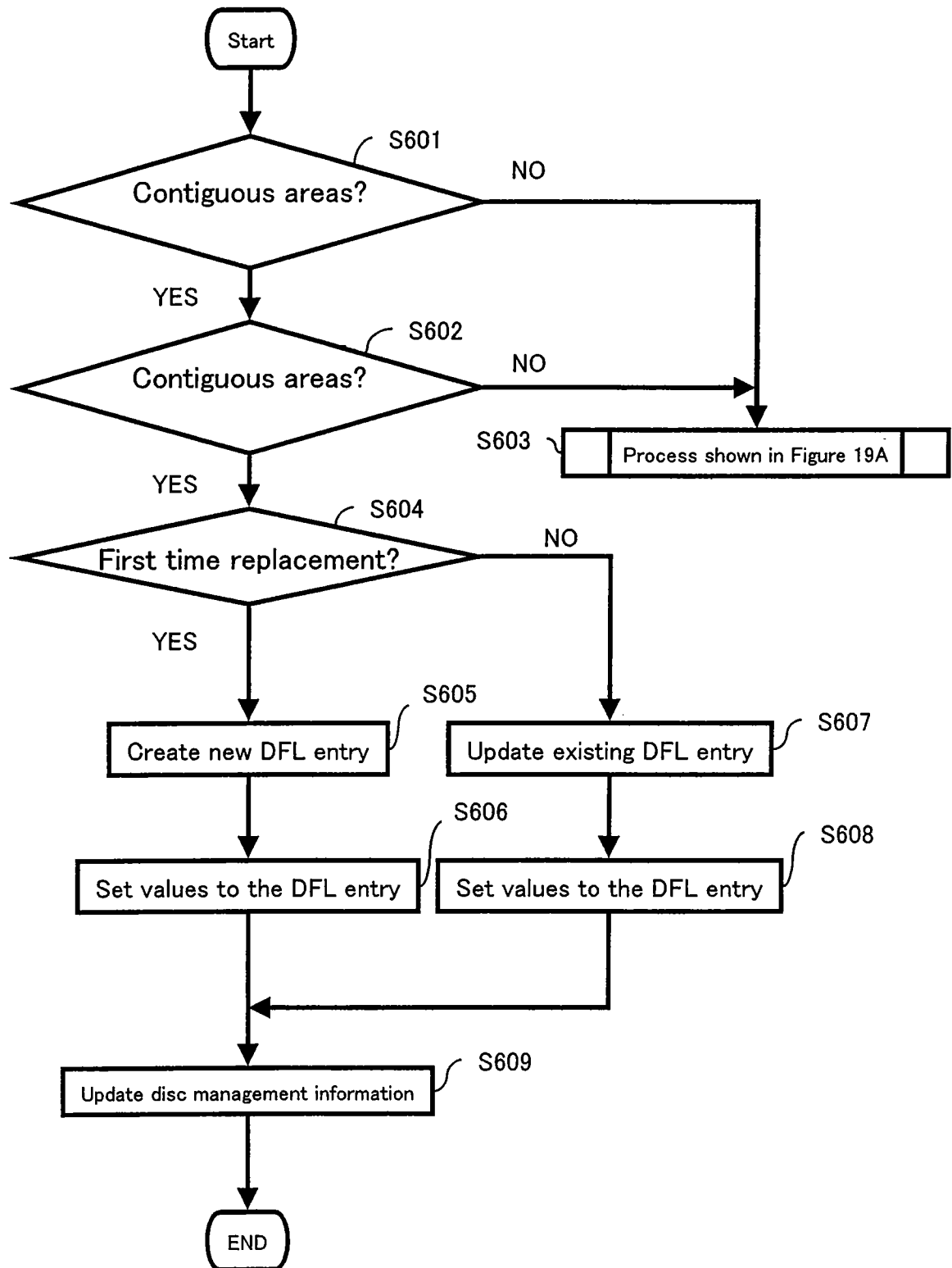


FIG. 20A

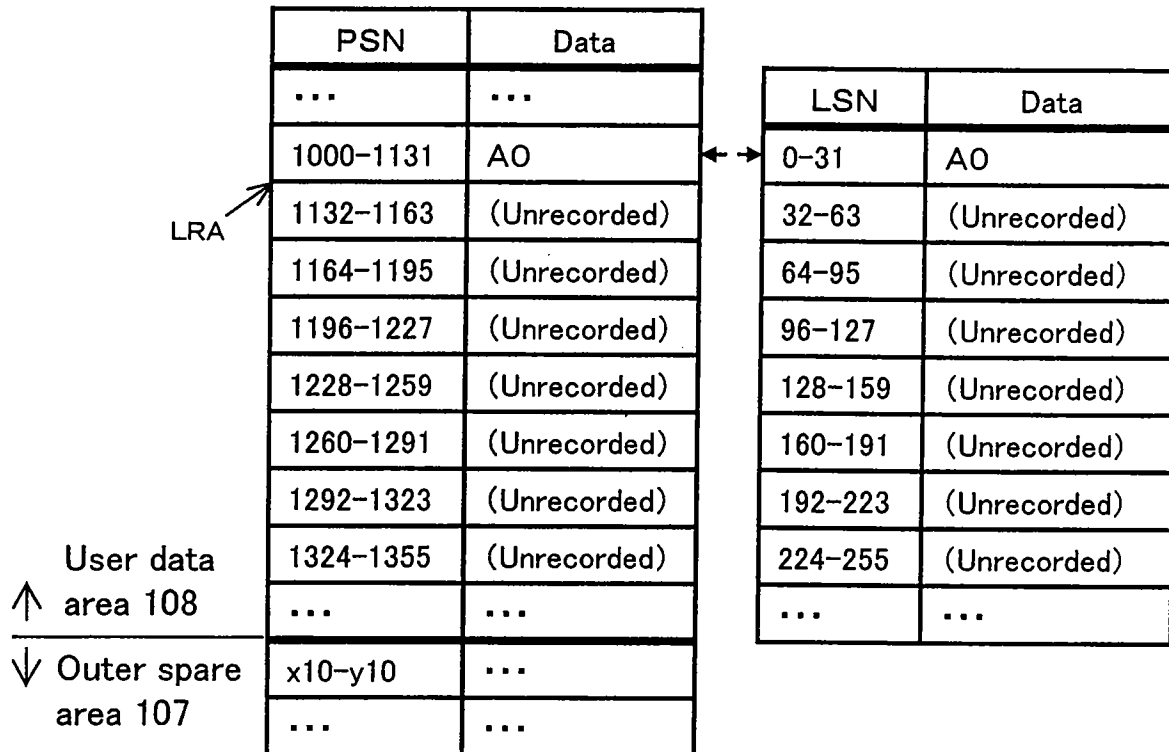


FIG. 20B

Header information 1001

FIG. 21A

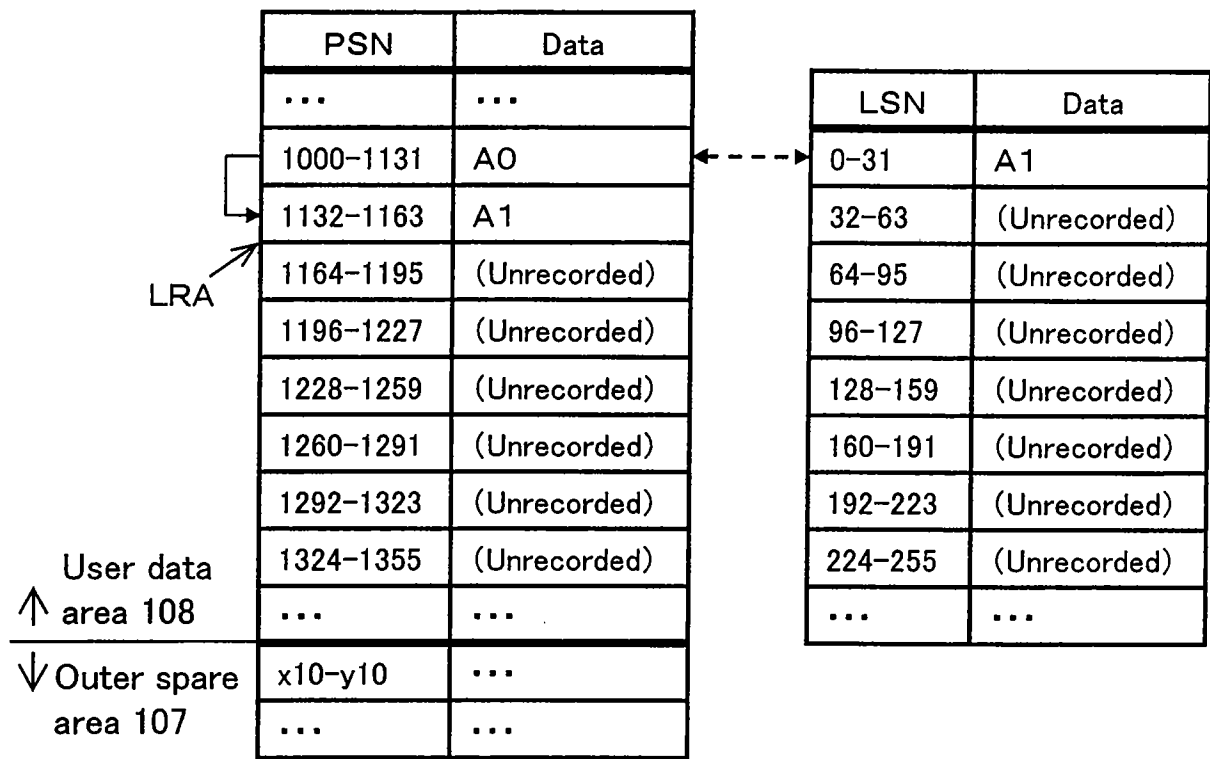


FIG. 21B

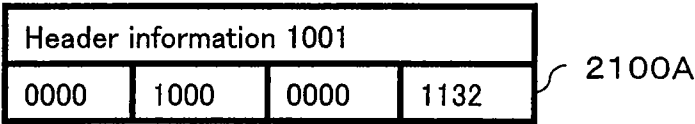


FIG. 22A

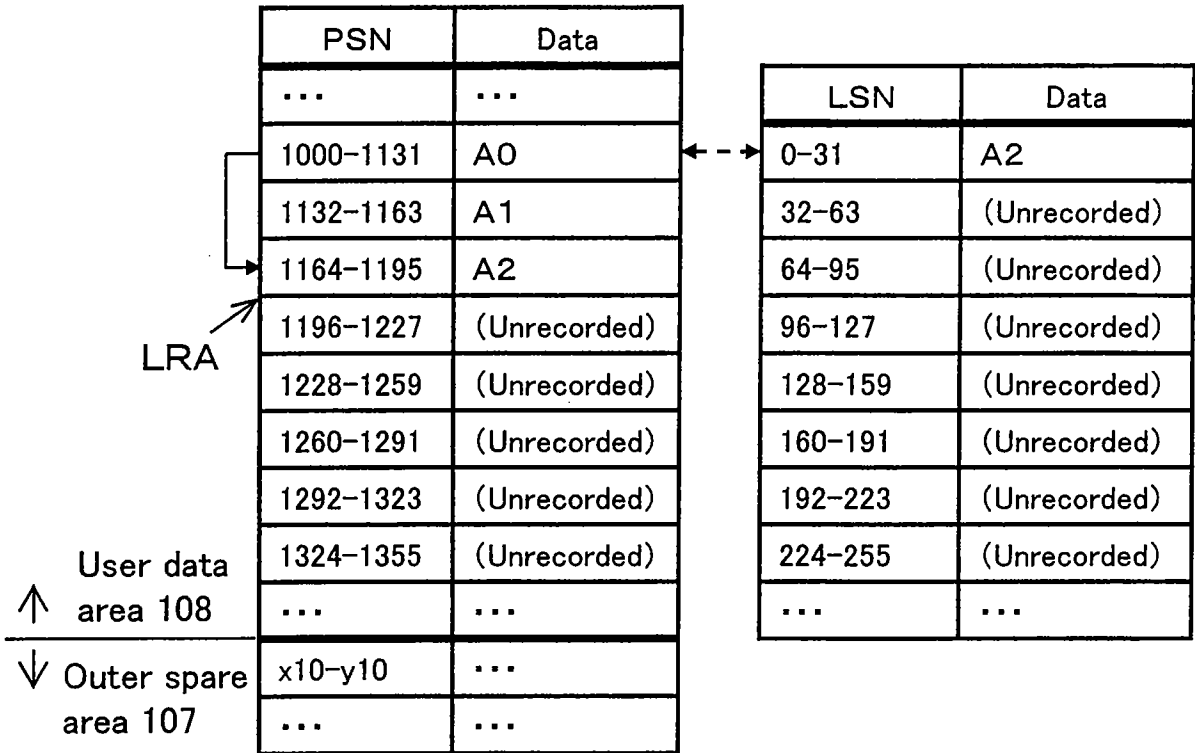


FIG. 22B

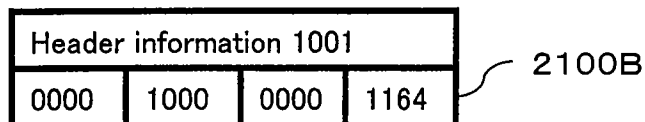


FIG. 23A

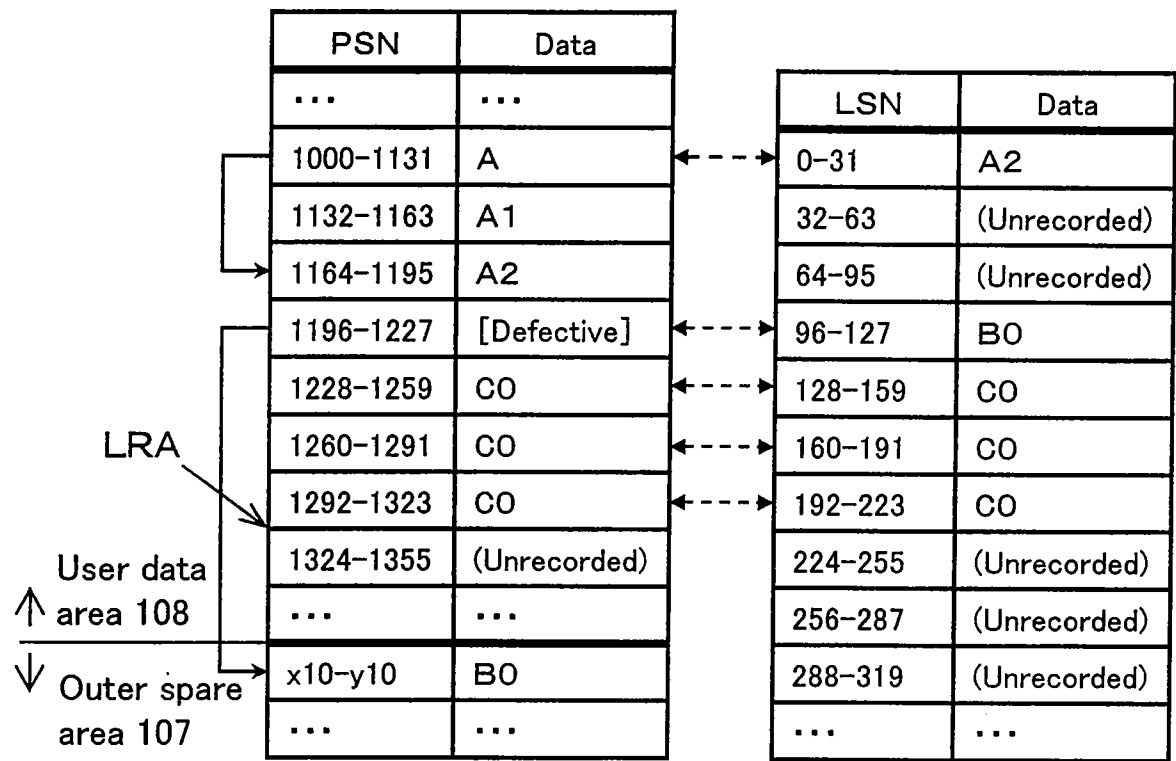


FIG. 23B

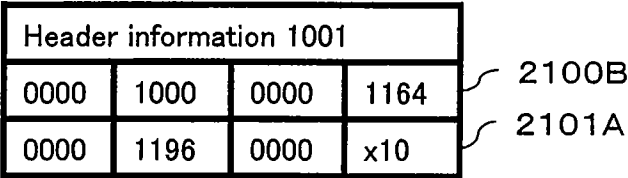


FIG. 24A

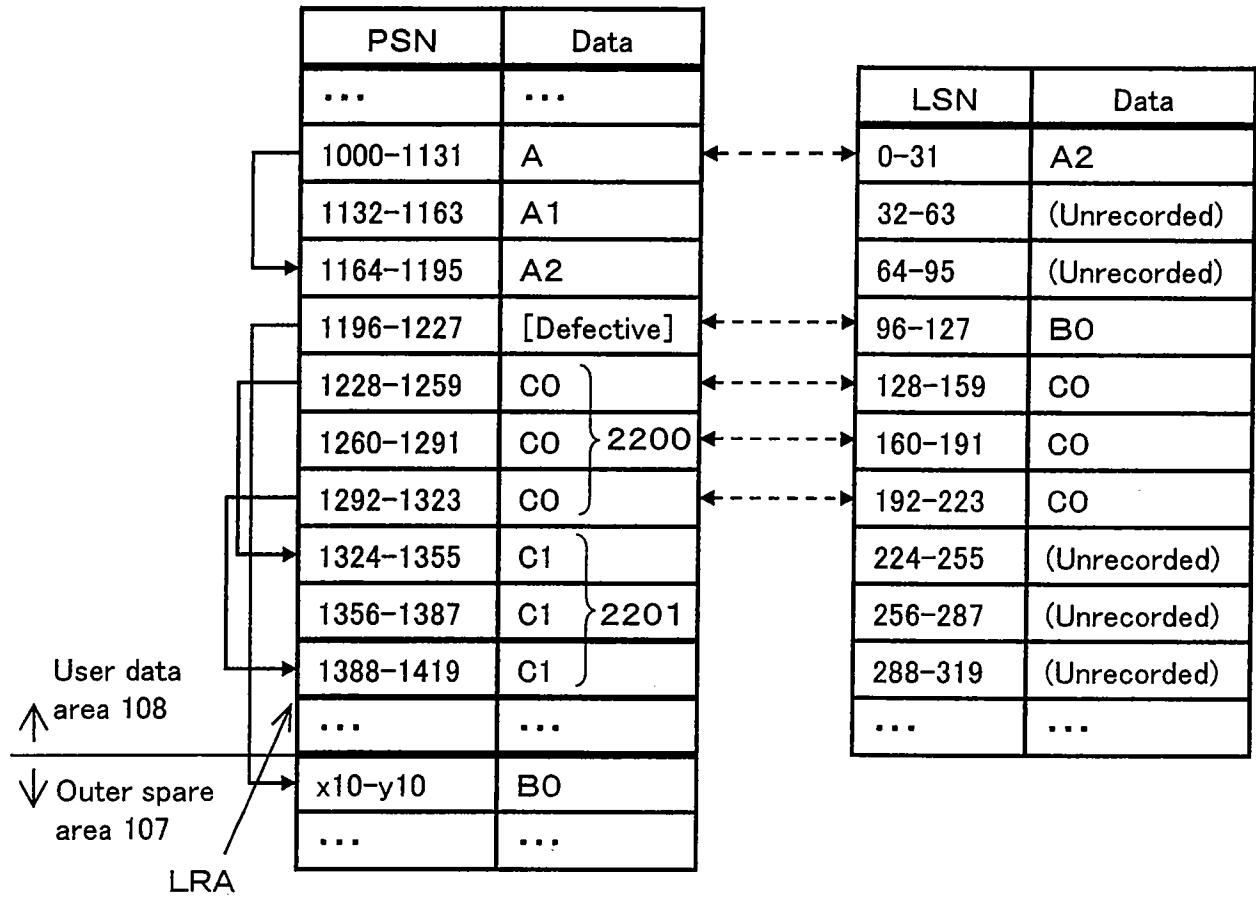
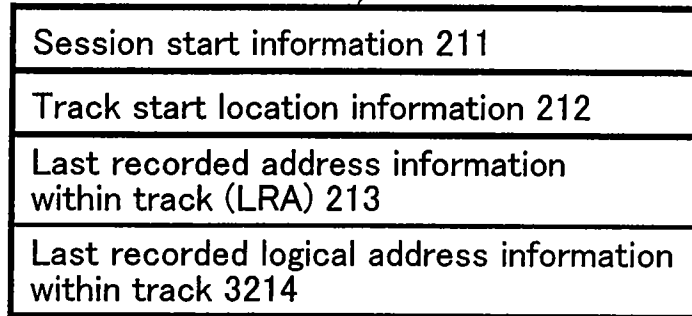


FIG. 24B

Header information 1001				
0000	1000	0000	1164	2100B
0000	1196	0000	x10	2101A
0000	1228	0001	1324	2102A
0000	1292	0010	1388	2103A

FIG. 25

3210



Session start information 211
Track start location information 212
Last recorded address information within track (LRA) 213
Last recorded logical address information within track 3214

FIG. 26A

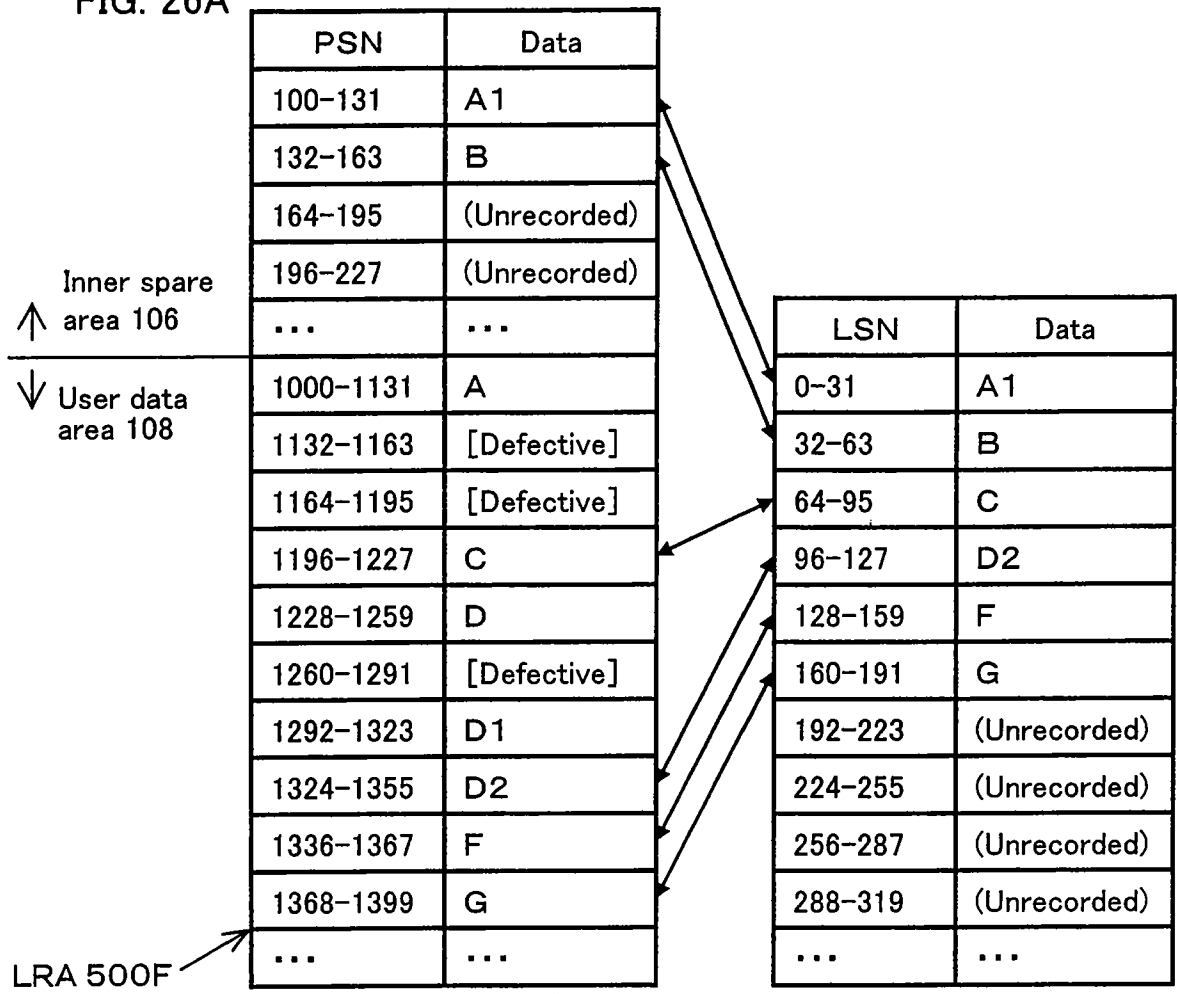


FIG. 26B

1000F

Status information			Original location	Replacement location	
0	0	00	1000	100	521
0	0	00	1132	132	522
0	1	00	1164	1196	523
0	1	00	1196	1324	524
0	1	00	1228	1336	525
0	1	00	1260	1368	526
1	0	00	1132	0	530
1	0	00	1164	0	531
1	0	00	1260	0	532

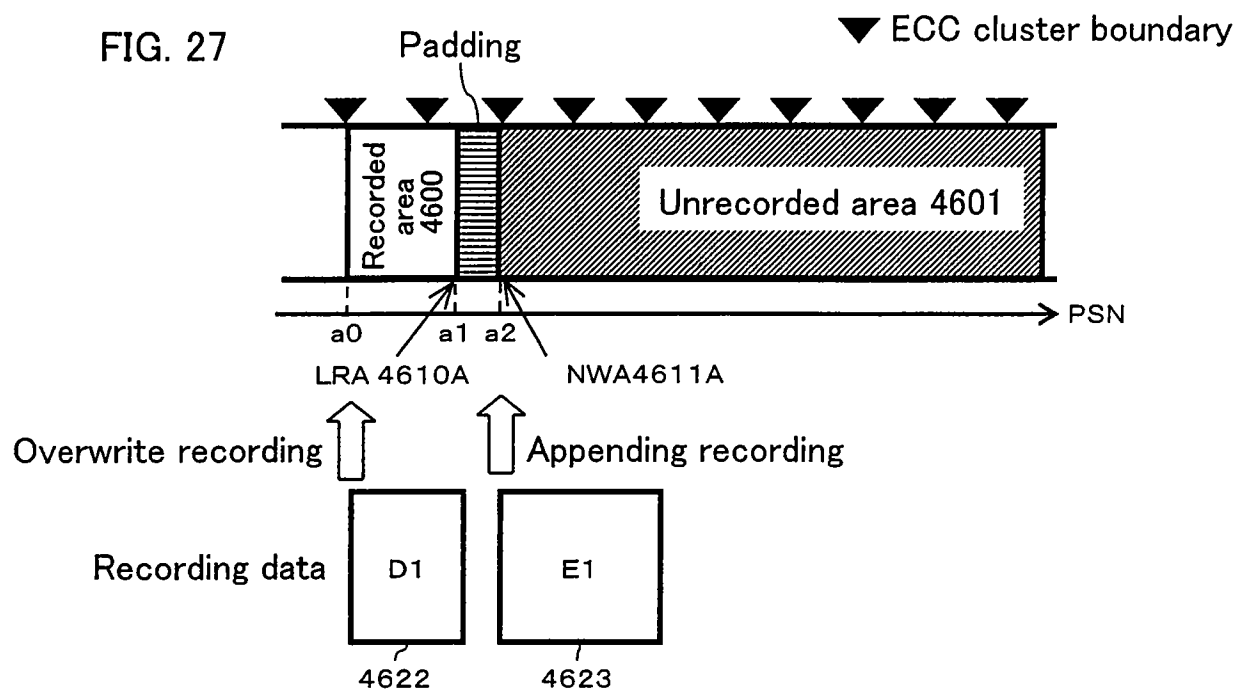


FIG. 28

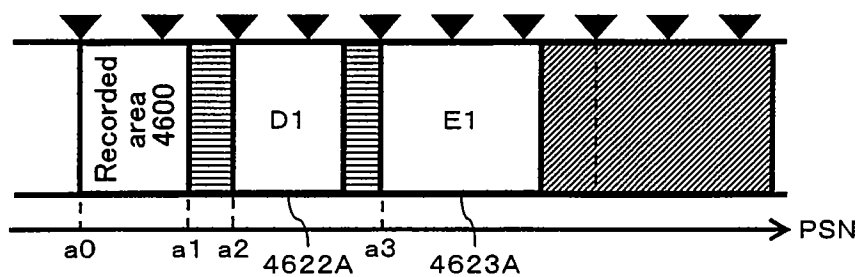


FIG. 29

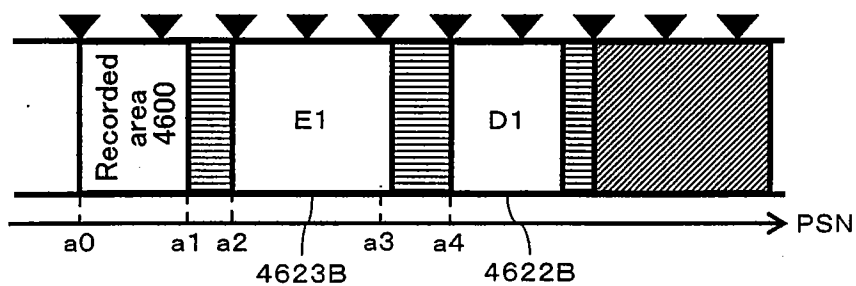


FIG. 30

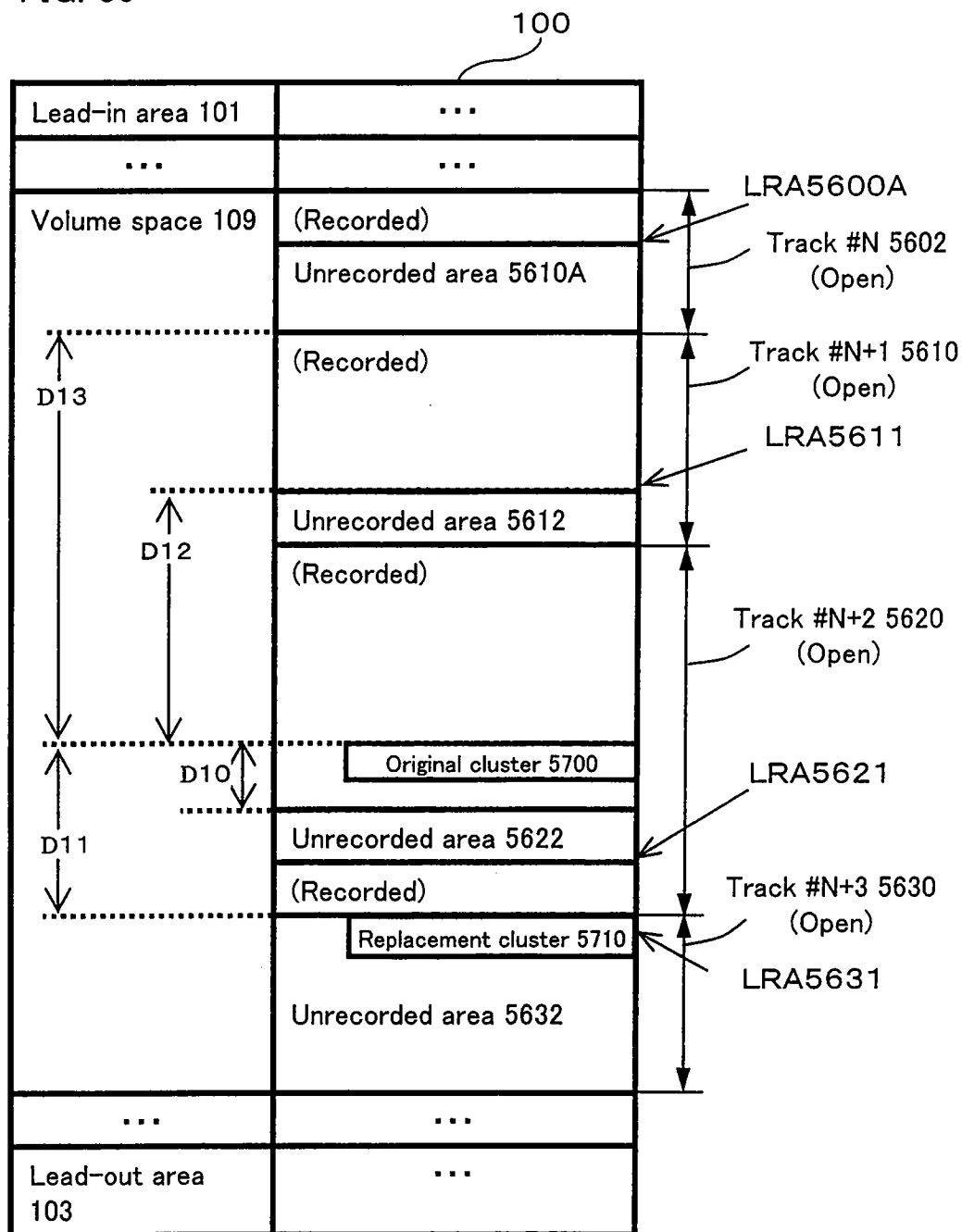


FIG. 31

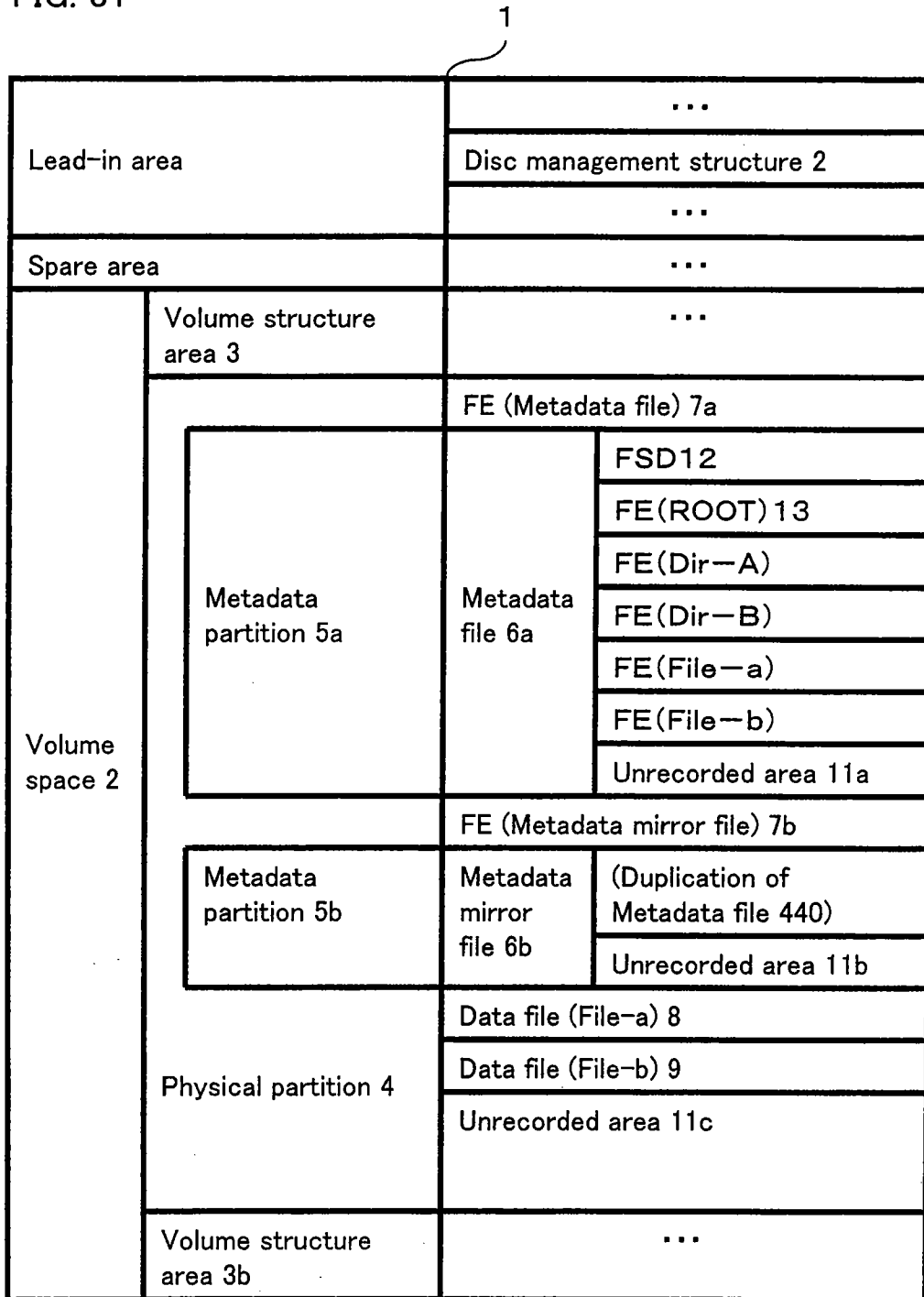


FIG. 32

FIG. 32

1

Lead-in area		...		
		Disc management structure 2		
		...		
Spare area 17				
		FE(ROOT) 16		
Volume space 2	Volume structure area 3	...		
		FE (Metadata file) 7a		
	Metadata partition 5a	Metadata file 6a	FSD12	
			FE(ROOT) 13	
			FE(Dir-A)	
			FE(Dir-B)	
			FE(File-a)	
			FE(File-b)	
			FE(File-c) 14	
			Unrecorded area 11a	
		FE (Metadata mirror file) 7b		
	Metadata partition 5b	Metadata mirror file 6b	(Duplication of Metadata file 440)	
			Unrecorded area 11b	
	Physical partition 420	Data file (File-a) 8		
		Data file (File-b) 9		
Data file (File-c) 15				
Unrecorded area 11c				
Volume structure area 3b	...			

FIG. 33A

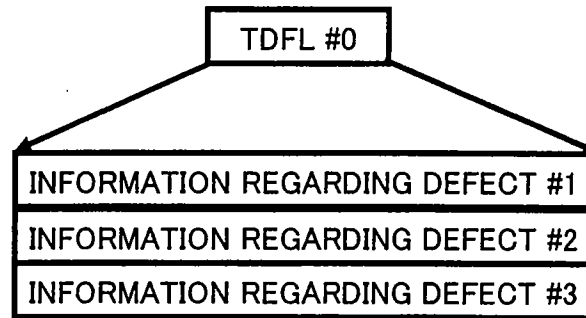


FIG. 33B

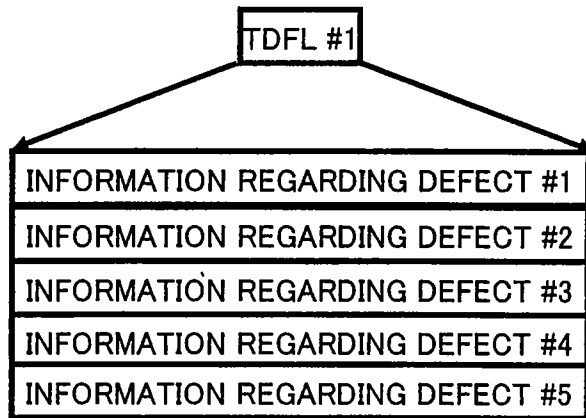


Fig.34

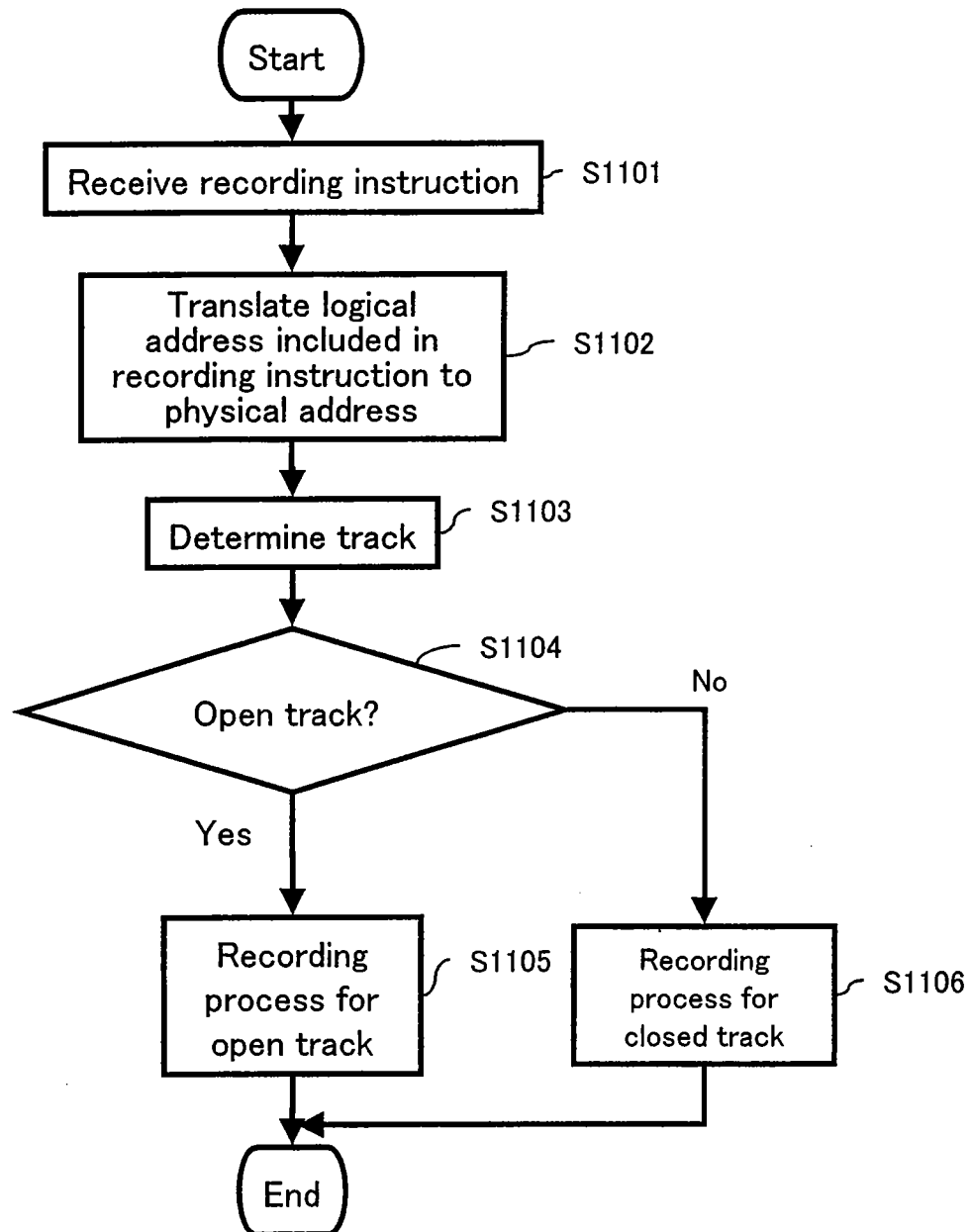


Fig.35A

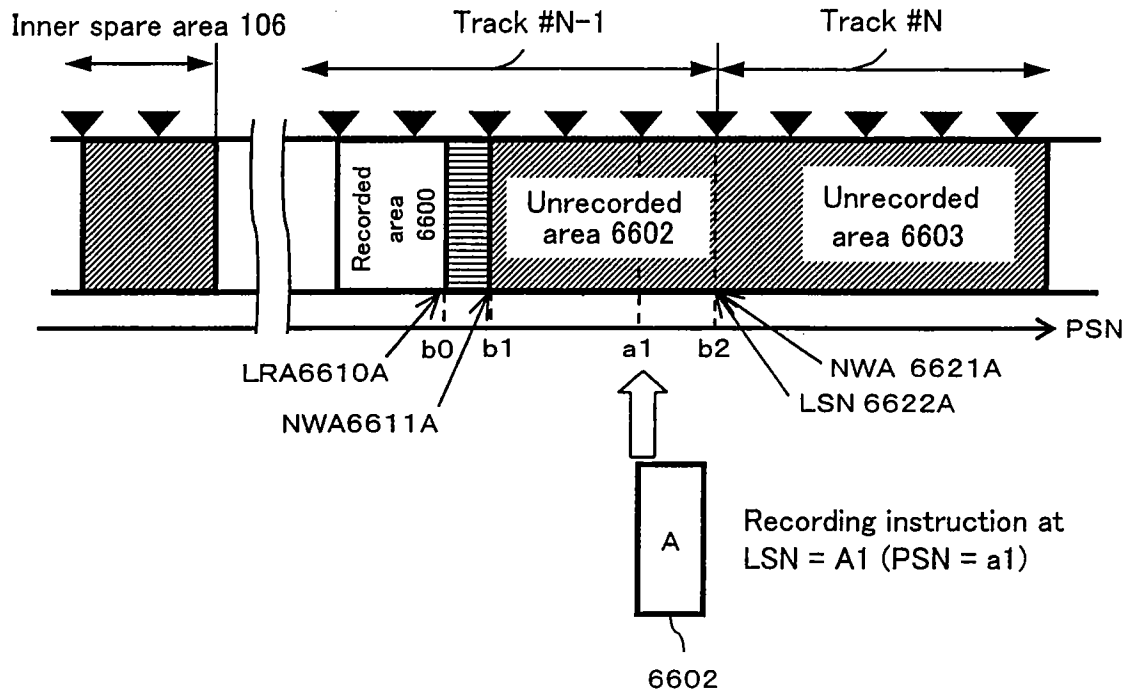


Fig.36A

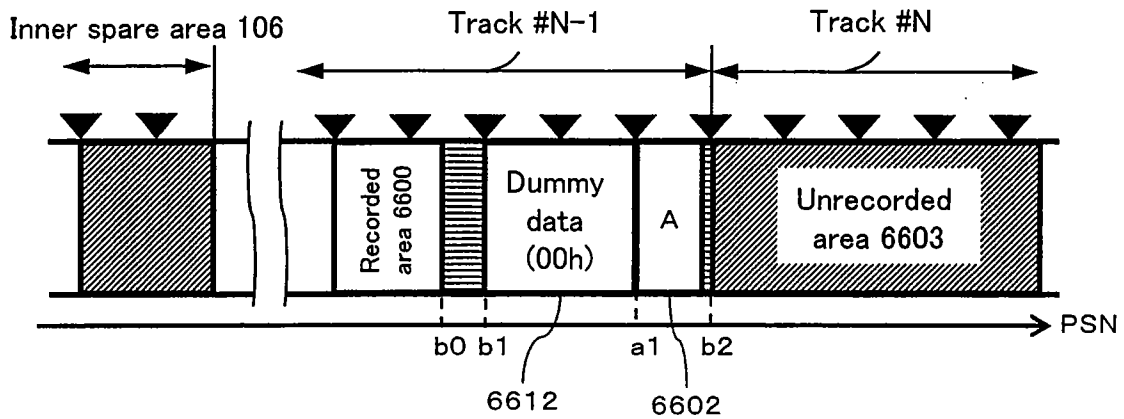


Fig.37A

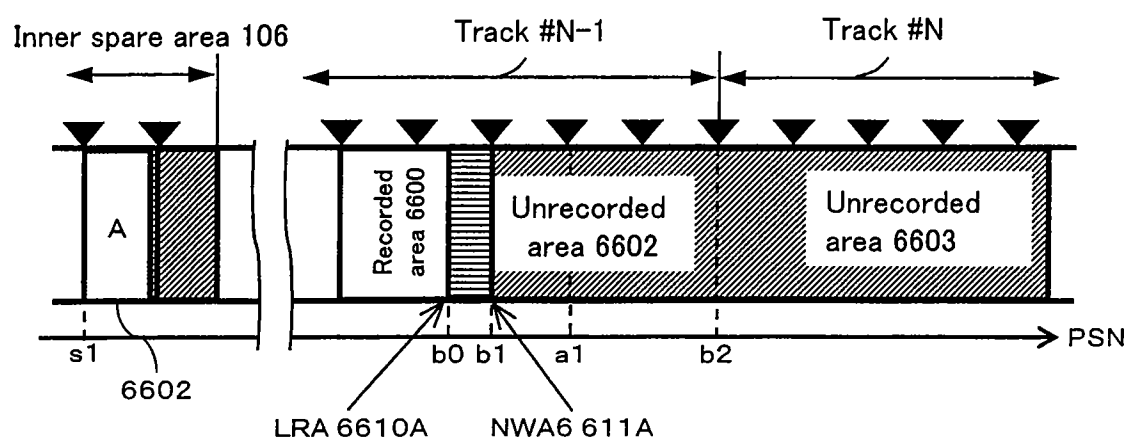


Fig.37B

Status 1 2011A	Defective cluster first PSN 2012	Status 2 2011B	Replacement cluster first PSN 2013
0000	a1	0000	s1

6615

Fig.38A

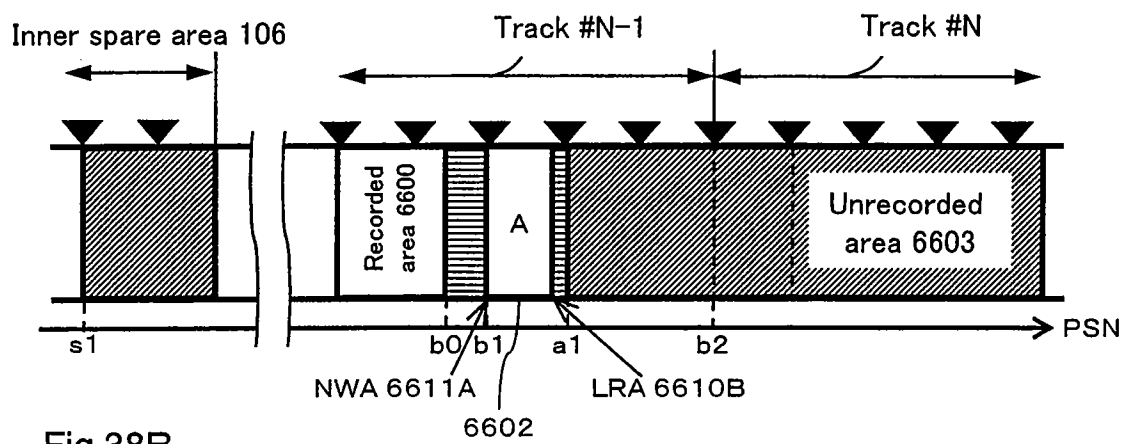


Fig.38B

Status 1 2011A	Defective cluster first PSN 2012	Status 2 2011B	Replacement cluster first PSN 2013
0000	a1	0000	b1

6616

Fig.39A

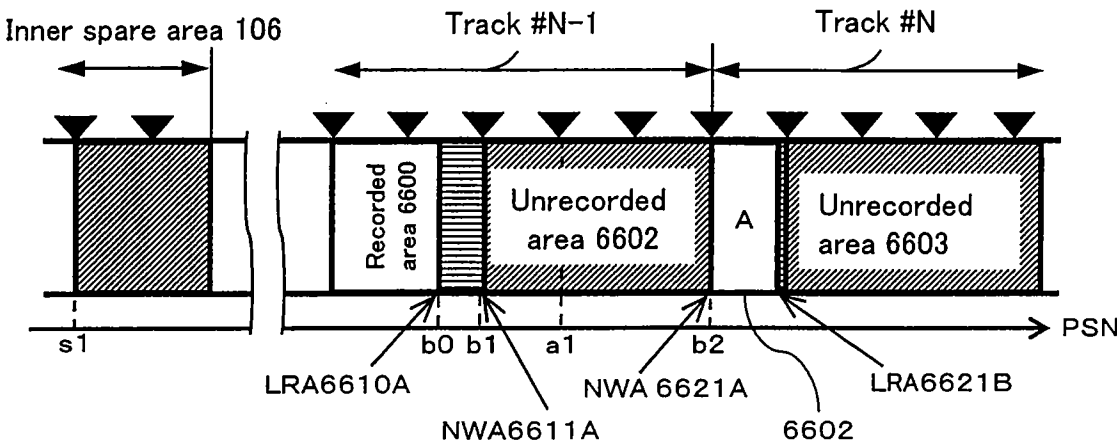


Fig.39B

Status 1 2011A	Defective cluster first PSN 2012	Status 2 2011B	Replacement cluster first PSN 2013
0000	a1	0000	b2

7615

Fig.40A

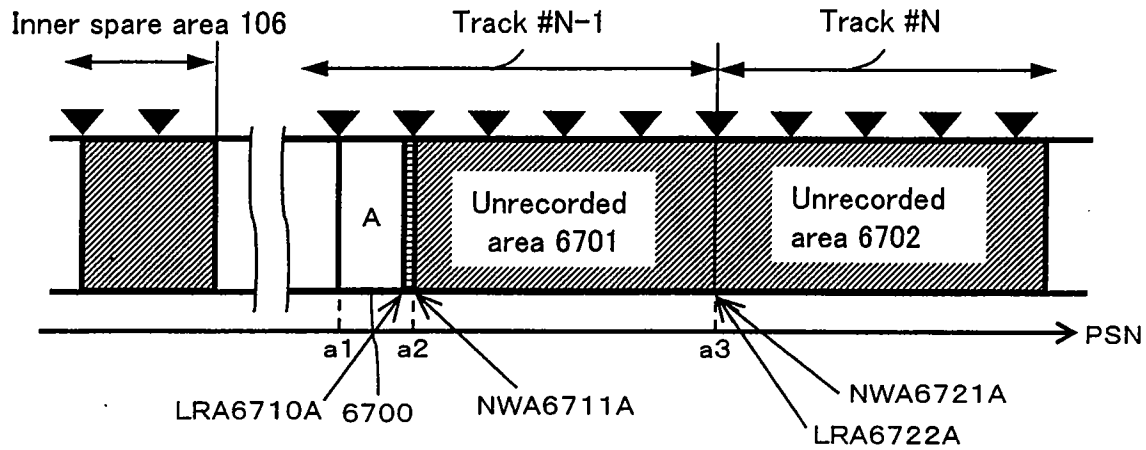


Fig.41A

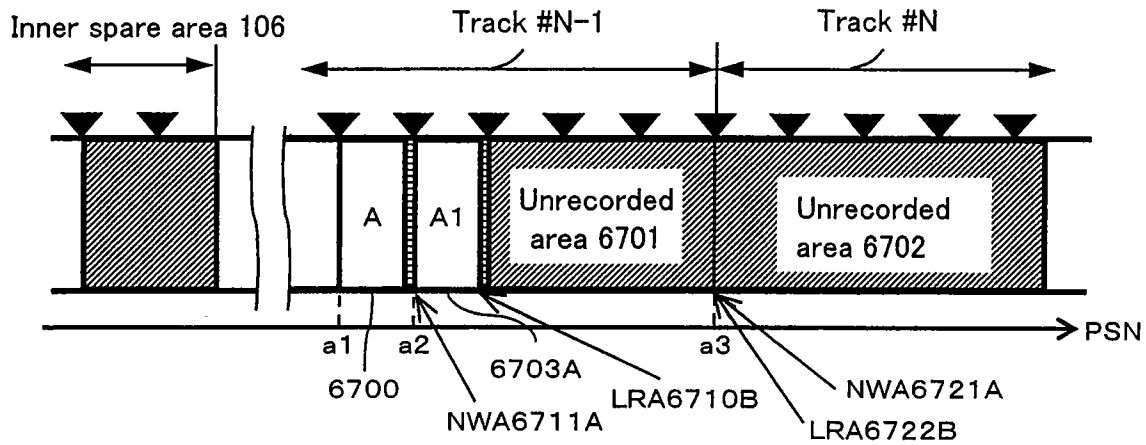


Fig.41B

Status 1 2011A	Defective cluster first PSN 2012	Status 2 2011B	Replacement cluster first PSN 2013
0000	a1	0000	a2

6730

Fig.42A

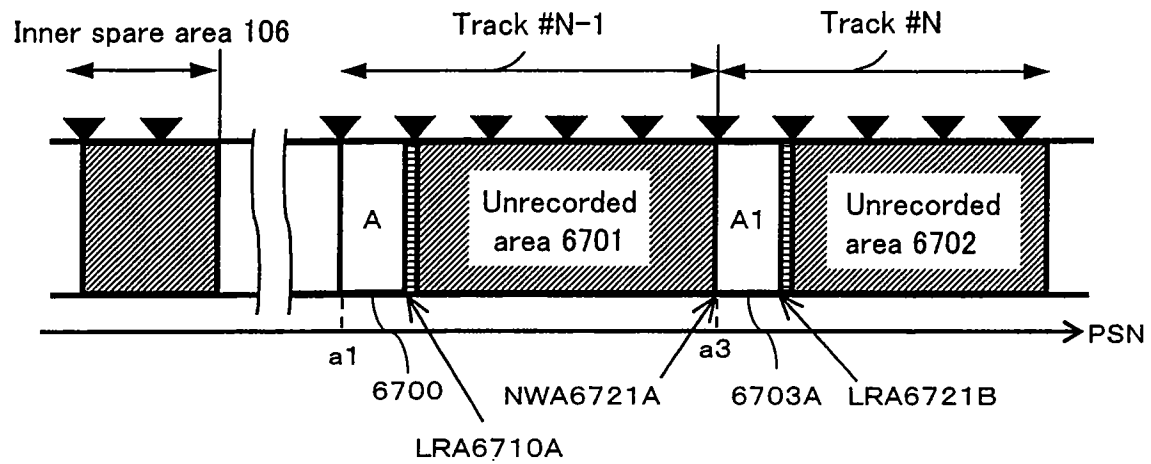


Fig.42B

Status 1 2011A	Defective cluster first PSN 2012	Status 2 2011B	Replacement cluster first PSN 2013	6733
0000	a1	0000	a3	

Fig.43

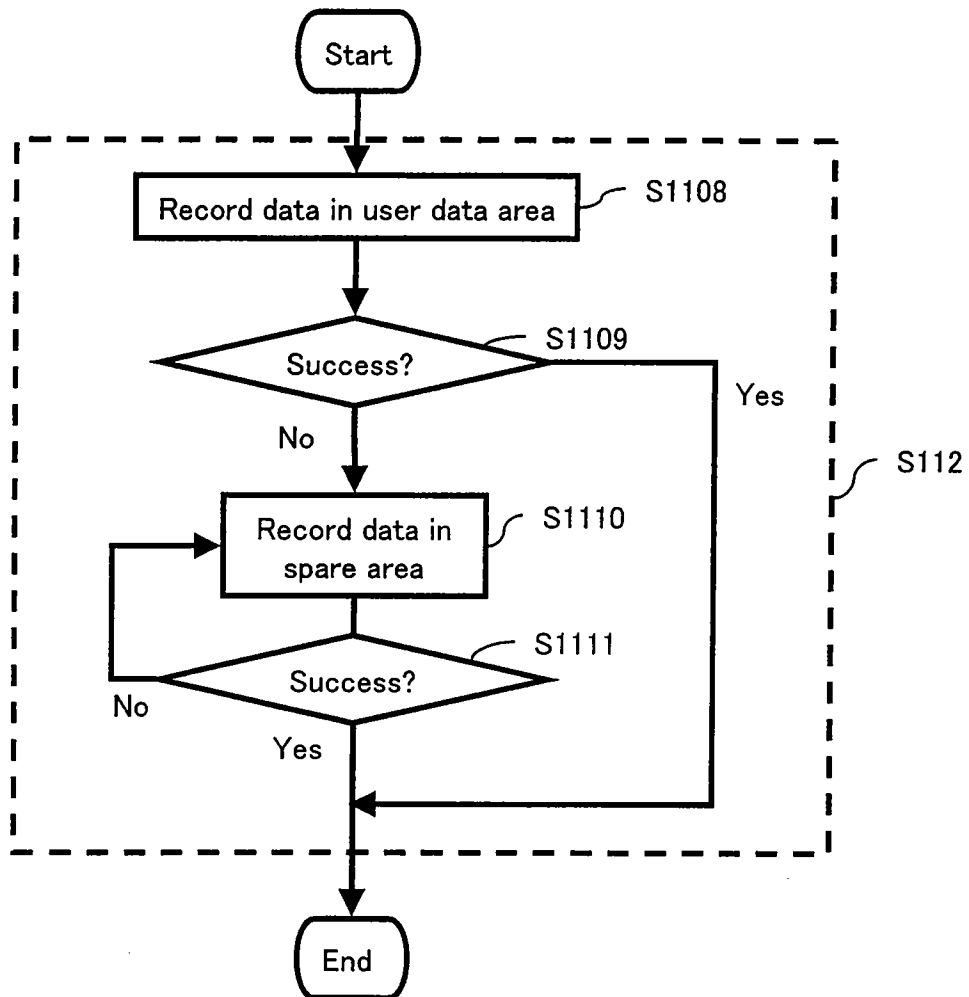


Fig.44A

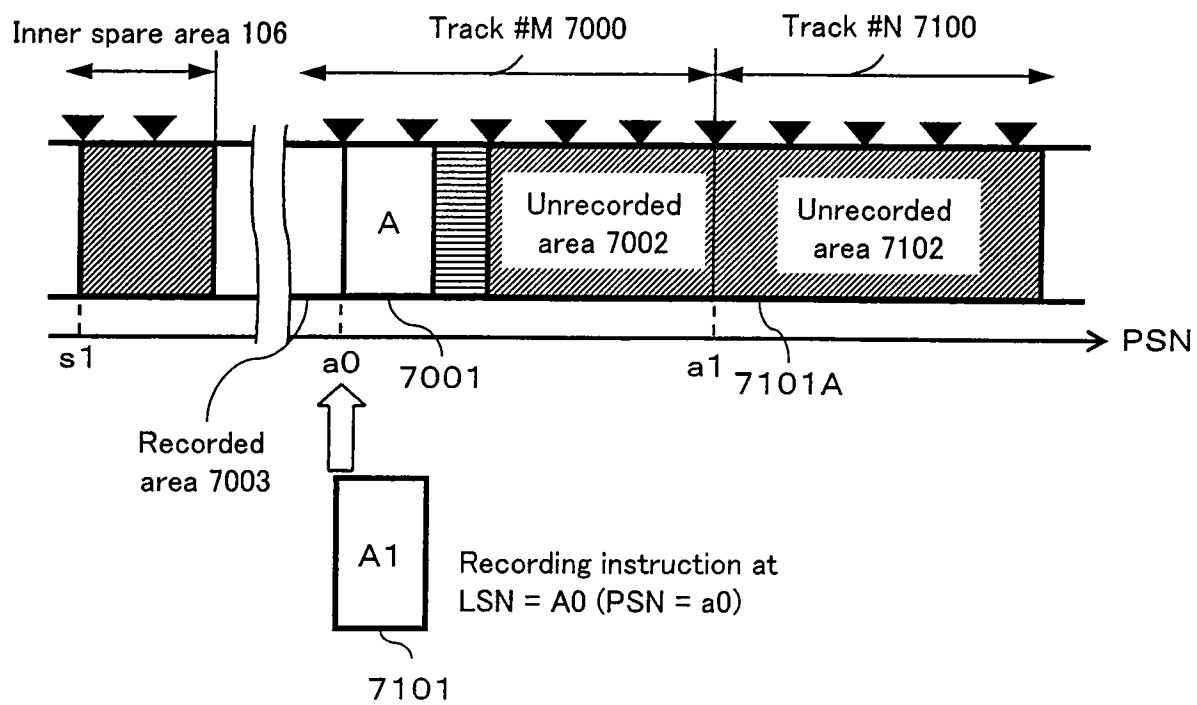


Fig.45A

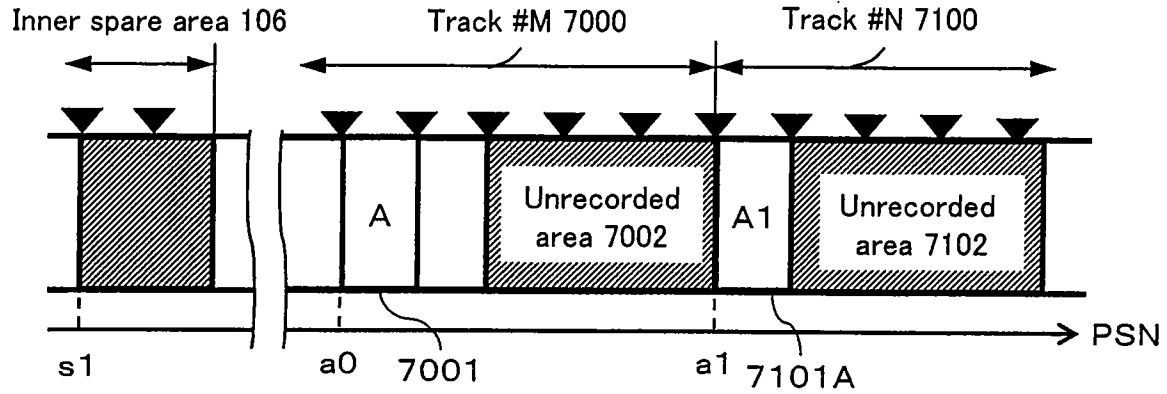


Fig.45B

Status 1 2011A	Defective cluster first PSN 2012	Status 2 2011B	Replacement cluster first PSN 2013
0000	a0	0000	a1

7200

Fig.46A

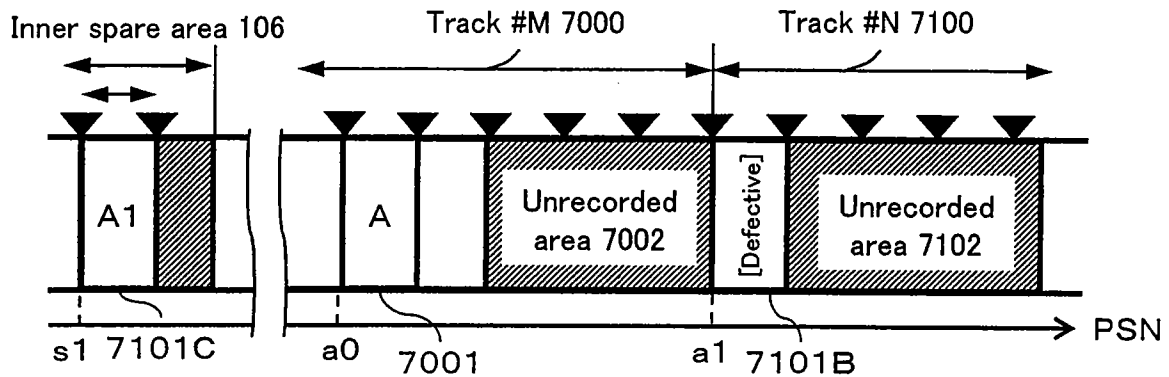


Fig.46B

Status 1 2011A	Defective cluster first PSN 2012	Status 2 2011B	Replacement cluster first PSN 2013
0000	a0	0000	s1

7201

Fig.47

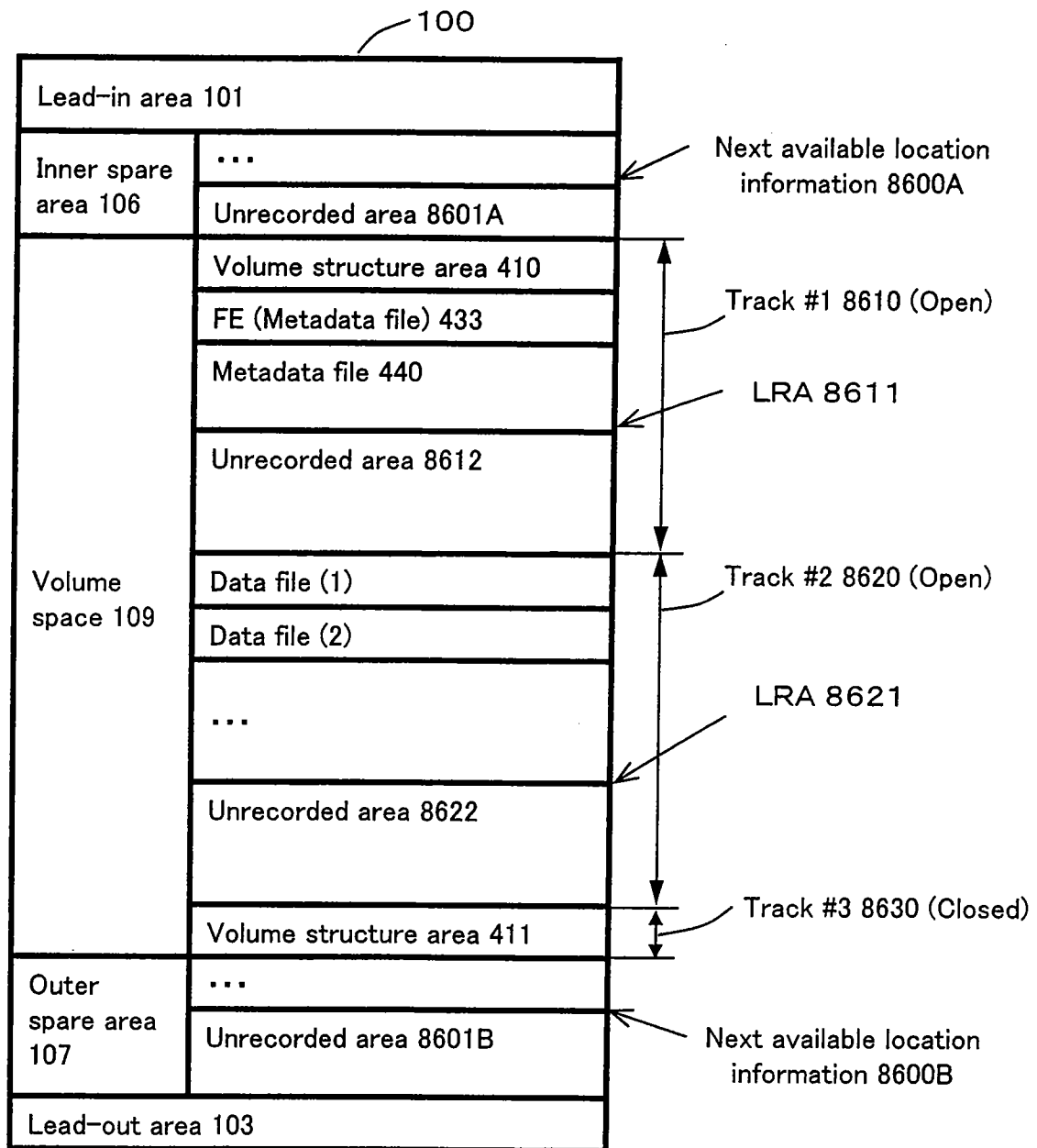


Fig.48

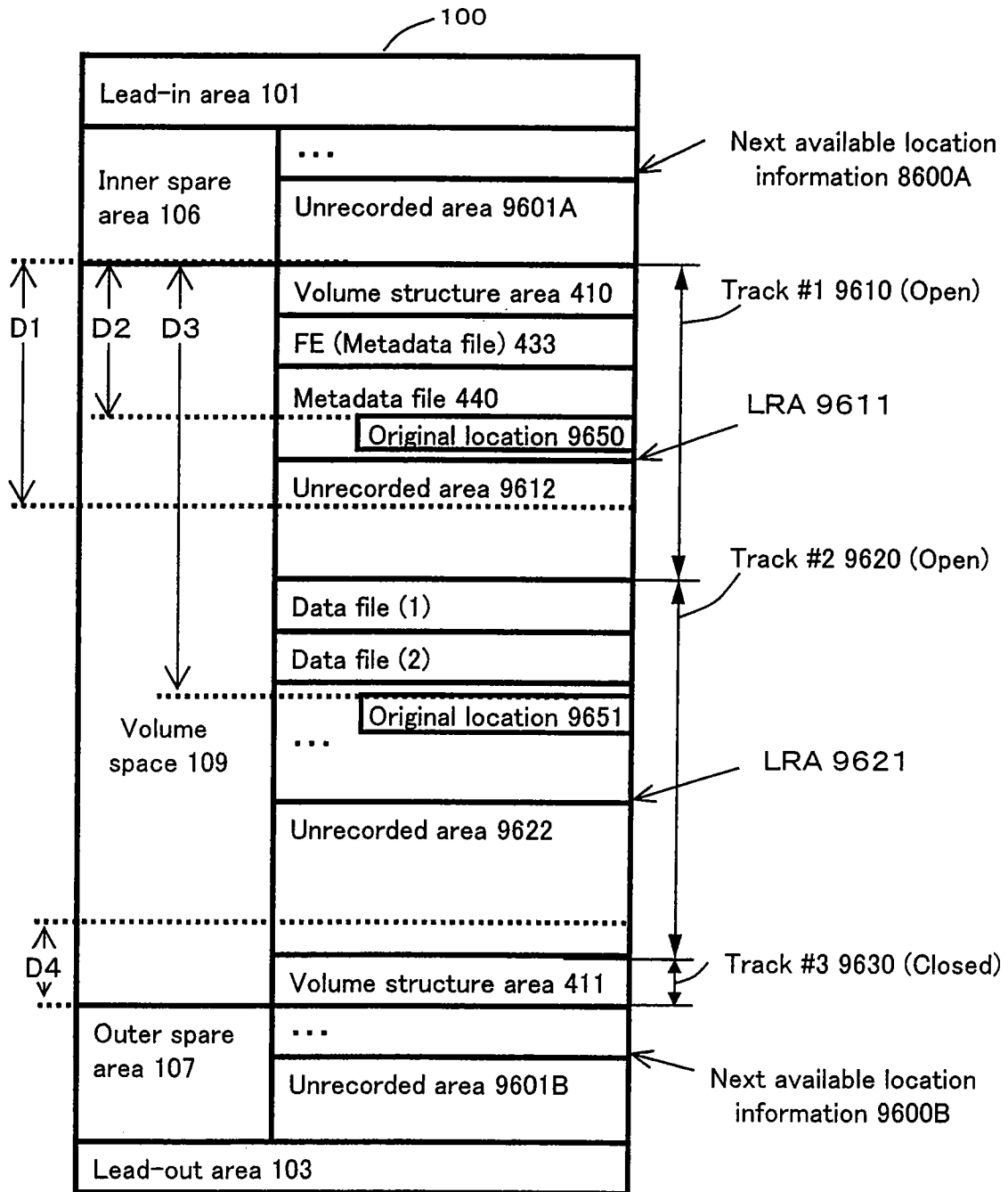


Fig.49A

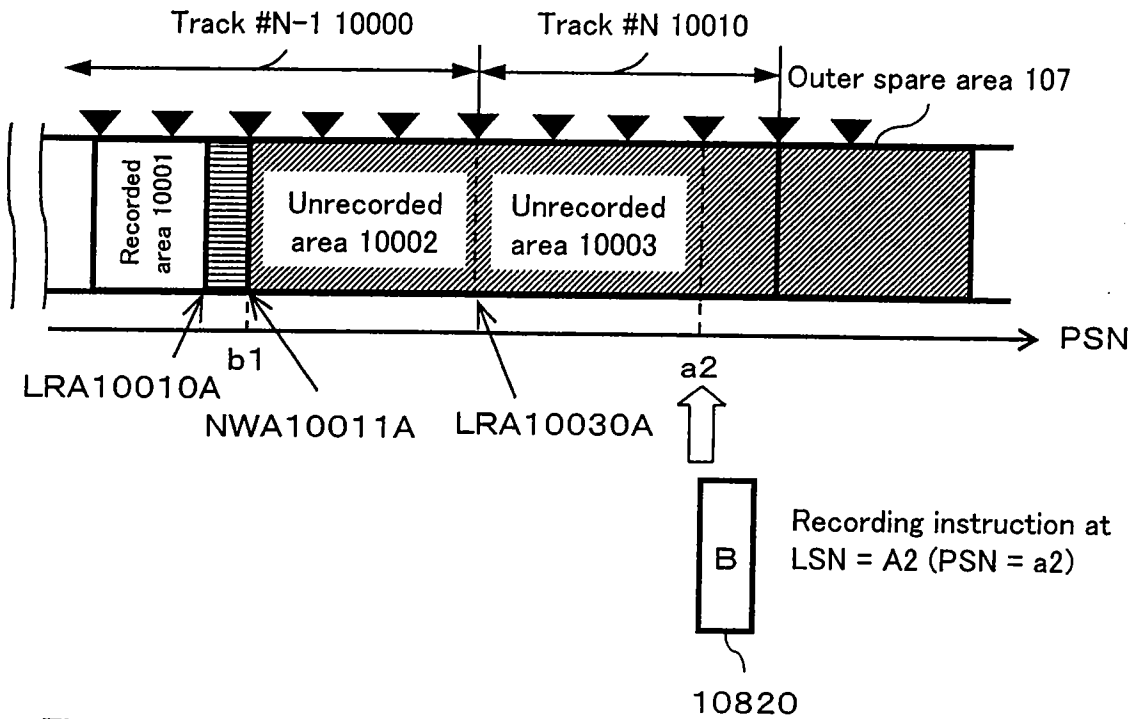


Fig.50A

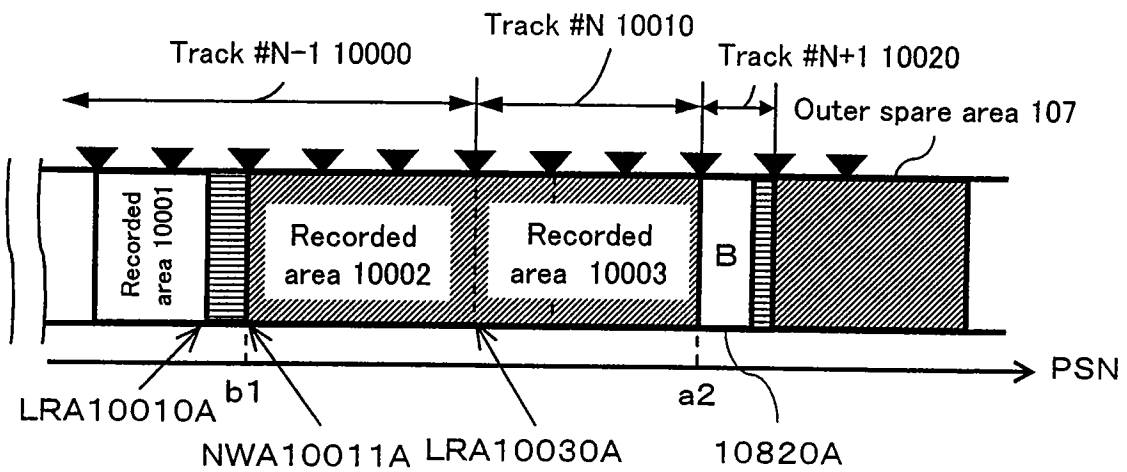


Fig.51A

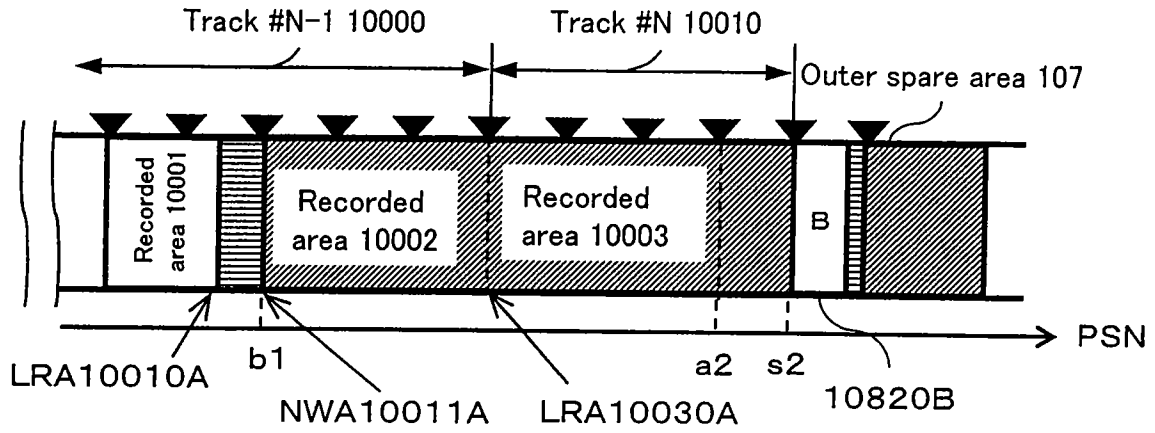


Fig.51B

Status information			Original location	Replacement location
...				
0	0	00	a2	s2
...				

10817

Fig.52A

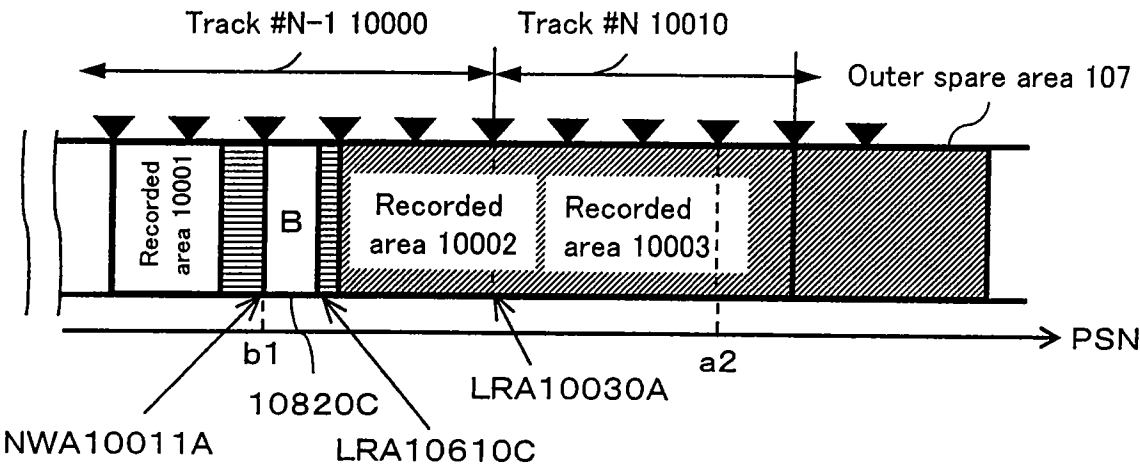


Fig.52B

Status information			Original location	Replacement location
...				
0	1	00	b1	0
0	0	00	a2	b1
...				

10819

10818

Fig.53A

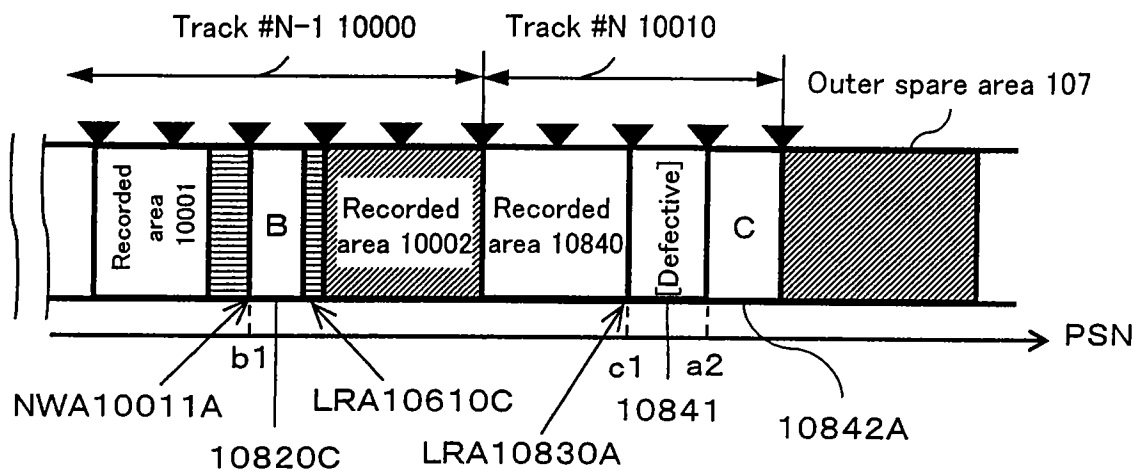


Fig.53B

Status information			Original location	Replacement location
...				
0	0	00	b1	0
0	1	00	c1	a2
0	1	00	a2	b1
...				

10819

10820

10818

Fig.54

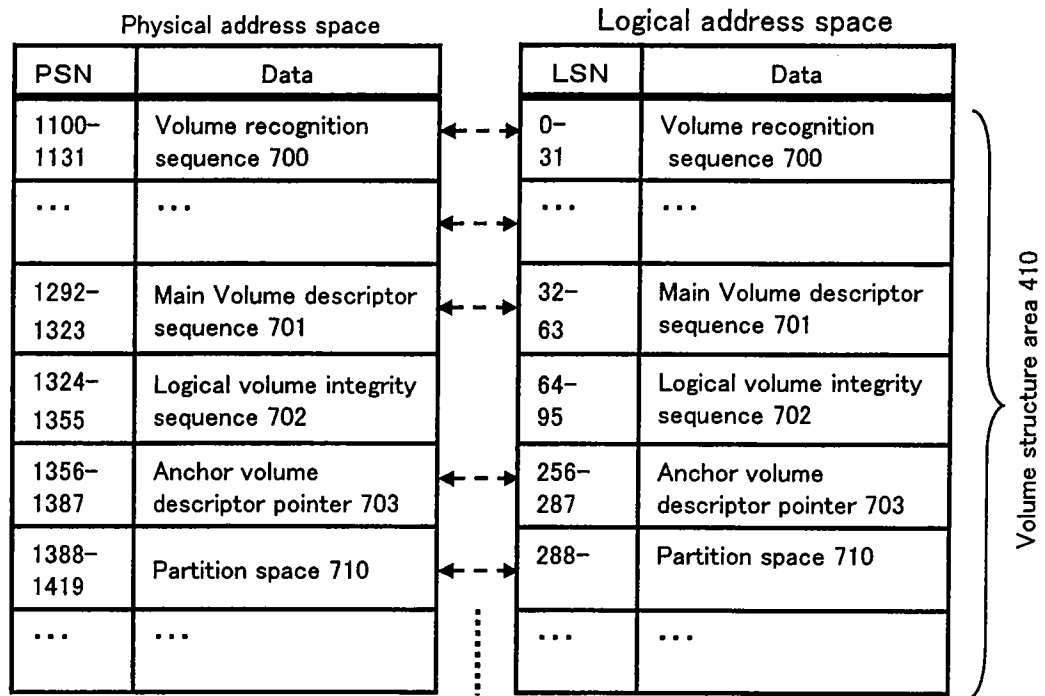


Fig.55

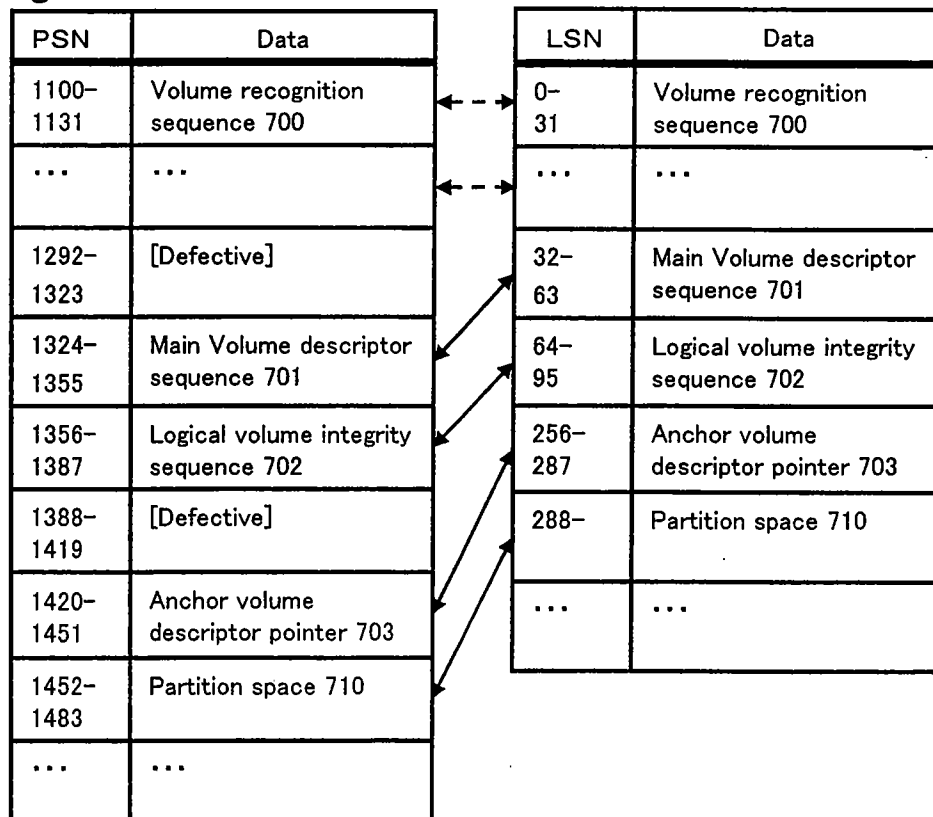


Fig.56

